

CHAPTER 7.0 LIST OF MITIGATION MEASURES AND ENVIRONMENTAL DESIGN CONSIDERATIONS

Section 21081.6 of the Public Resources Code requires that public agencies adopt a reporting or monitoring program for the changes made to the Project or conditions of Project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during Project implementation.

Per the requirements of the *Environmental Impact Report Format and General Content Requirements* (County of San Diego, 2006), the list must include: “1) a comprehensive listing of all mitigation measures proposed for the Project; and 2) a listing of all design considerations that were relied upon to reduce impacts (e.g., applicant proposed open space areas, road improvements, drainage systems).” The following is a list of the proposed mitigation measures to be included as part of the mitigation and monitoring program for the proposed Project:

7.1 Mitigation Measures Proposed for the Project

7.1.1 Air Quality

A. Mitigation Measures from the EOMSP Final EIR

Mitigation measures were identified by the EOMSP Final EIR (1994) to address impacts to air quality resulting from construction and long-term operation of the uses identified by the EOMSP, and included the following:

- 9A. *The County shall require applicants to use several techniques to reduce potentially significant construction emissions.*
- 9B. *Development projects shall provide bicycle facilities to promote use of alternative transportation methods.*
- 9C. *The County shall coordinate with appropriate agencies to implement reduction of vehicle emissions.*

B. Project-Specific Mitigation for Impacts to Air Quality

Project-Specific Mitigation

M-AQ-1a Direct Construction Impacts

Intent: In order to lower construction emissions of PM₁₀ and PM_{2.5} to below the County’s established Screening Level Thresholds (SLTs) for construction activities, grading monitoring and emission reduction activities shall occur. **Description of Requirement:** Grading Plans shall be prepared, which clearly describe the grading monitoring and emission reduction activities that shall be undertaken during earthmoving activities to implement Section 87.428 “Dust Control Measures” of the County’s Grading Ordinance. The Grading Plans shall include the following:

- The Permit Compliance Engineer (as defined in Section 87.420 of the County Grading Ordinance) shall provide documentation/evidence of compliance with each note in the regular reports required pursuant to Section 87.420(a) of the County’s Grading Ordinance.

- “During grading and ground-disturbing construction activities, the Permit Compliance Engineer shall assure that water trucks or sprinkler systems apply water to areas undergoing active ground disturbance a minimum of three (3) times daily (3.2 hour watering interval). All areas of disturbed soils shall be kept damp enough to prevent airborne dust from dispersing beyond the boundaries of the site. The Permit Compliance Engineer shall order increased watering frequency when airborne dust is visible. A log of all site watering activities shall be maintained by the Permit Compliance Engineer, and this log shall be made available to the County upon request.”

Reporting: the Permit Compliance Engineer shall maintain a log of daily site watering activities, and shall be provided to the County upon request. The site watering log also shall be provided in the regular reports required pursuant to Section 87.420(a) of the County’s Grading Ordinance.

- “The Permit Compliance Engineer shall assure that temporary signs indicating a maximum 15 MPH speed limit are placed along all unpaved roads and/or unpaved haul routes on the Project site, before construction activities commence. Signs shall be spaced no more than 1,000 lineal feet apart. The Permit Compliance Engineer also shall be responsible for assuring radar enforcement of the 15 MPH speed limit throughout the duration of construction activities.”

Reporting: The Permit Compliance Engineer shall provide evidence of sign installation by including photographs of the installed signs and a scaled diagram or copy of the grading plan, identifying the location of each sign, in the regular reports required pursuant to Section 87.420(a) of the County’s Grading Ordinance.

- “A gravel apron measuring at least 25 feet long by road width shall be provided at all unpaved entrances into the construction site and shall be maintained until the entrance is removed, paved, or no longer in use by construction vehicles and equipment.”

Reporting: The Permit Compliance Engineer shall include photographs of all constructed gravel aprons in the regular reports required pursuant to Section 87.420(a) of the County’s Grading Ordinance.

- “The Permit Compliance Engineer shall ensure that all grading, earthmoving, and ground-disturbing construction activities are temporarily halted when sustained wind speeds exceed 25 MPH.”

Reporting: The Permit Compliance Engineer shall maintain a log of all work days and time durations when grading, earthmoving, and ground-disturbing construction activities were temporarily halted due to sustained wind speeds exceeding 25 MPH. The log shall be provided in the regular reports required pursuant to Section 87.420(a) of the County’s Grading Ordinance.

- “The Permit Compliance Engineer shall ensure that street sweeping of adjacent public roads occurs at the end of each work day that visible soil material is carried onto paved roads and at least once every two weeks. A log of all street sweeping

activities shall be maintained by the Permit Compliance Engineer and shall be made available to the County upon request”

Reporting: The Permit Compliance Engineer shall maintain a log of all street sweeping activities, and shall be provided to the County upon request. The log also shall be provided in the regular reports required pursuant to Section 87.420(a) of the County’s Grading Ordinance.

- “The Permit Compliance Engineer shall assure that chemical dust suppressants are applied at least once per year to all designated unpaved parking areas used by construction workers and/or construction equipment.”

Reporting: The regular reports required pursuant to Section 87.420(a) of the County’s Grading Ordinance shall include a map depicting the locations of all designated construction parking areas, a description of the chemical suppressants utilized, and the date(s) of application.

- “The Permit Compliance Engineer shall ensure that rough grading activities do not overlap with other phases of construction (i.e., paving, underground, building, and architectural coatings). A schedule of such activities shall be maintained by the Permit Compliance Engineer, and shall be made available to the County upon request.”

Reporting: A copy of the construction schedule shall be included in the regular reports required pursuant to Section 87.420(a) of the County’s Grading Ordinance. Construction schedules also shall be provided to the County for review upon request.

Documentation: The applicant shall prepare the Grading Plan pursuant to this mitigation measure and then shall submit it to the Department of Public Works, along with payment of all applicable review fees and deposits. In addition, the Permit Compliance Engineer shall provide the Department of Public Works with evidence of compliance with this mitigation measure in the regular reports required pursuant to Section 87.420(a) of the County’s Grading Ordinance, and shall make such evidence available when requested by the County. **Timing:** Prior to the approval of each grading permit. **Monitoring:** The Department of Public Works shall review the Grading Plan for conformance with this mitigation measure. Upon approval of each Grading Plan, a decision of approval and a grading permit shall be issued to the applicant.

M-AQ-1b **Direct Construction Impacts**

Intent: In order to lower construction emissions of NO_x to below the County’s established Screening Level Thresholds (SLTs) for construction activities, emission reduction activities shall occur. **Description of Requirement:** Grading Plans shall be prepared, which clearly describe the emission reduction activities that shall be undertaken during construction activities to reduce construction vehicle and equipment emissions of NO_x. The Grading Plan shall include the following:

The Permit Compliance Engineer (as defined in Section 87.420 of the County Grading Ordinance) shall provide documentation/evidence of compliance with the note in the regular reports required pursuant to Section 87.420(a) of the County’s Grading

Ordinance.

- “The Permit Compliance Engineer shall verify that all construction equipment and vehicles are properly tuned and maintained in accordance with manufacturers’ recommendations, to ensure proper timing and tuning of engines.”

Reporting: Construction equipment and vehicle maintenance records and their design specification data sheets shall be provided in the regular reports required pursuant to Section 87.420(a) of the County’s Grading Ordinance.

- “The Permit Compliance Engineer shall instruct all diesel-fueled construction vehicle and equipment operators to restrict idling times to five minutes and to turn off engines when vehicles and equipment are not in use. The Permit Compliance Engineer shall be responsible for enforcing this requirement during all construction activities.”

Documentation: The applicant shall prepare the Grading Plan pursuant to this mitigation measure and then shall submit it to the Department of Public Works, along with payment of all applicable review fees and deposits. **Timing:** Prior to the approval of each grading permit. **Monitoring:** The Department of Public Works shall review the Grading Plan for conformance with this mitigation measure. Upon approval of each Grading Plan, a decision of approval and a grading permit shall be issued to the applicant.

M-AQ-2 Long Term Operational Impacts

Mitigation Measures M-AQ-3a, M-AQ-3b, M-AQ-3c, and M-AQ-6 shall apply.

M-AQ-3a Sensitive Receptors Impacts - Residences

Intent: In order to mitigate long-term operational impacts to off-site sensitive receptors due to diesel exhaust emissions, the Project shall incorporate design measures to reduce the incremental carcinogenic risk associated with Project implementation. **Description of Requirement:** For buildings with truck yards or loading docks, the County DPLU shall ensure that the Site Plans require the placement of signs at all truck parking and loading bay areas to identify applicable California Air Resources Board (CARB) anti-idling regulations. Each sign shall include the text “*Extended Idling of Truck Engines is not Permitted,*” and give directions to truck parking spaces with electrical hookups.

Documentation: The applicant shall prepare the Site Plan(s) pursuant to this mitigation measure and in accordance with DPLU Form #506, *Applicant’s Guide to Site Plan*. The applicant shall submit the Site Plans to the Department of Planning and Land Use, along with all applicable review fees and deposits. **Timing:** Pursuant to Section 3.3.1 of the EOMSP, review for compliance with this mitigation measure shall occur prior to approval of future Site Plans for the site. Evidence of sign installation shall occur prior to issuance of a certificate of occupancy. **Monitoring:** The Department of Planning and Land Use shall review the Site Plans for conformance with this mitigation measure. In addition, evidence of sign installation shall be provided to the County DPLU prior to the issuance of a certificate of occupancy.

M-AQ-3b Sensitive Receptors Impacts - Residences

Intent: In order to mitigate long-term operational impacts to off-site sensitive receptors due to diesel exhaust emissions, the Project shall incorporate design measures to reduce

the incremental carcinogenic risk associated with Project implementation. **Description of Requirement:** For buildings with truck yards and/or loading docks, the County DPLU shall review the parking lot striping and security gating plan to ensure that the site design allows for adequate truck stacking at gates and allows for trucks to park overnight on the site to prevent queuing of trucks outside the facility. **Documentation:** The applicant shall prepare the Site Plan(s) pursuant to this mitigation measure and in accordance with DPLU Form #506, *Applicant's Guide to Site Plan*. The applicant shall submit the Site Plans to the Department of Planning and Land Use, along with all applicable review fees and deposits. **Timing:** Pursuant to Section 3.3.1 of the EOMSP, review for compliance with this mitigation measure shall occur prior to approval of future Site Plans for the site. **Monitoring:** The Department of Planning and Land Use shall review the Site Plans for conformance with this mitigation measure.

M-AQ-3c Sensitive Receptors Impacts - Residences

Intent: In order to mitigate long-term operational impacts to off-site sensitive receptors due to diesel exhaust emissions, the Project shall incorporate design measures to reduce the incremental carcinogenic risk associated with Project implementation. **Description of Requirement:** Any buildings that would receive shipping container refrigerator units (RUs) shall provide electrical hookups at all loading dock door positions. The locations of the electrical hookups shall be indicated on construction drawings and building plans and shall be subject to approval by the County DPLU. **Documentation:** The applicant shall prepare the Site Plan(s) pursuant to this mitigation measure and in accordance with DPLU Form #506, *Applicant's Guide to Site Plan*. The applicant shall submit the Site Plans to the Department of Planning and Land Use, along with all applicable review fees and deposits. **Timing:** Pursuant to Section 3.3.1 of the EOMSP, review for compliance with this mitigation measure shall occur prior to approval of future Site Plans for the site. Evidence of installed electrical hookups shall occur prior to issuance of a certificate of occupancy. **Monitoring:** The Department of Planning and Land Use shall review the Site Plans for conformance with this mitigation measure. In addition, evidence of installed electrical hookups shall be provided to the County DPLU prior to the issuance of a certificate of occupancy.

M-AQ-4 Sensitive Receptors Impacts – Workers

Mitigation Measures M-AQ-3a through M-AQ-3c shall apply.

M-AQ-5a Construction GHG Impacts

Intent: Construction equipment shall utilize biodiesel fuels, when feasible, to reduce GHG emissions that would occur during construction. **Description of Requirement:** Grading Plans shall be prepared for implementation of the project. Each grading plan shall clearly note the Project's requirement to use biodiesel fuels during construction. Each Grading Plan shall include the following note:

- *“With the exception of equipment used for asphalt paving, trenching, and off-site improvements, all diesel-powered construction equipment shall use B20 biodiesel fuel (comprising a minimum of 20% biodiesel) for the duration of construction activities. Any construction equipment whose warranty would be voided upon the use of B20 biodiesel fuel shall be exempt from this requirement. The County DPLU may exempt additional pieces of equipment from this requirement upon written request from the Permit Compliance Engineer documenting a valid technical, economic, or*

physical reason why the use of B20 biodiesel fuel cannot be used. This requirement shall only apply if B20 biodiesel fuel is available within 15 roadway miles from the proposed Project site at the time construction activities commence.”

Reporting: The Permit Compliance Engineer shall include evidence of the use of B20 biodiesel fuel in the regular reports required pursuant to Section 87.420(a) of the County’s Grading Ordinance, or shall provide evidence that B20 biodiesel fuel is not available within 15 roadway miles of the proposed Project site.

Documentation: The applicant shall prepare the Grading Plan pursuant to this mitigation measure and then shall submit it to the Department of Public Works, along with payment of all applicable review fees and deposits. **Timing:** Prior to the approval of each grading permit. **Monitoring:** The Department of Public Works shall review the Grading Plan for conformance with this mitigation measure. In addition, the Permit Compliance Engineer shall include evidence of the use of B20 biodiesel fuel in the regular reports required pursuant to Section 87.420(a) of the County’s Grading Ordinance, or shall provide evidence that B20 biodiesel fuel is not available within 15 roadway miles of the proposed Project site.

M-AQ-5b Construction GHG Impacts

Mitigation Measure M-AQ-6 shall apply.

M-AQ-6 Operational GHG Impacts

Intent: In order to mitigate for impacts related to long-term GHG emissions, design measures shall be incorporated into future site plans to achieve the objectives of AB 32. **Description of Requirement:** Implementing Site Plans shall include design measures to reduce long-term, operational GHG emissions by 25% below Title 24 requirements. The Site Plans shall incorporate the following:

The following measures are intended to provide alternative mitigation options for future Site Plan applications. It is intended that future implementing Site Plans would only be required to comply with either Option 1 or Option 2, and not both. In addition, as either option would achieve the targeted reductions of Area Source Greenhouse Gas Emissions¹, it is intended that future Site Plan applicants would be allowed to choose between Option 1 or Option 2.

- **Option 1**

To reduce the Project’s energy needs and fossil fuel consumption, thereby reducing GHG emissions, future building design shall follow the United States Green Building Council’s LEED Green Building Rating System, Version 3.0, “Core and Shell.” Each building shall achieve the minimum number of points to achieve LEED Certified status (minimum of 40 points)³. Although each building would be designed to achieve the minimum number of points to achieve LEED Certified status, the Project Applicant is not required to seek official LEED certification through the

¹ News Release, United States Green Building Council, April 3, 2008. The New Building Institute (NBI) validated that third party LEED certified buildings outperform non-LEED certified buildings. In the NBI study, the results indicate that new buildings certified under the USGBC LEED certifications systems are, on average, performing 25-30% better than non-LEED certified buildings in terms of energy use. (<http://www.usgbc.org/Docs/News/NBI%20and%20CoStar%20Group%20Release%20040108.pdf>)

United States Green Building Council. A list of design features and their point allocations shall be prepared by a LEED Accredited Professional architect, following the LEED checklist criteria, and shall be submitted to the County DPLU in conjunction with Site Plan and Building Permit applications.

OR

- **Option 2**

Prior to the approval of future Site Plans for any lots within TM5505, the Project applicant shall prepare a subsequent Greenhouse Gas Emissions Inventory Analysis report to identify measures incorporated into the Site Plan's design to reduce emissions of area-source Greenhouse Gases. The report shall identify measures that are physically and economically feasible to implement in the Site Plan design in order to achieve a performance standard of at least a 25% reduction of area source Greenhouse Gas emissions as compared to the 2005 Title 24 requirements.

The Greenhouse Gas Emissions Inventory Analysis report shall cite references that estimate Greenhouse Gas emissions reductions associated with Site Plan design features, and shall provide emission reduction credits for those design features that result in quantifiable reductions of Greenhouse Gas Emissions.

Examples of measures that would serve to assist in achieving the 25% GHG reduction target / performance standard may include, but shall not be limited to, the following (it being understood that certain of the measures described in the bullets below may be adopted by the Project applicant, to the extent such measures are found to be physically and economically feasible, in order to achieve the reductions specified above, and that not all or any such measures need to be adopted, and that other feasible measures not listed below may be adopted, as long as the above performance standard is met):

- Design buildings to use natural systems to reduce energy use. Locate and orient buildings to take advantage of shade, prevailing winds, landscaping and sun screens to reduce energy use.
- Design buildings to maximize water efficiency and reduce water use (excluding irrigation) beyond the Energy Policy Act of 1992 guidelines for fixture performance. This measure is expected to reduce GHG emissions associated with water conveyance by approximately 28-30%².
- Provide interior and exterior collection and storage areas for recyclables and green waste, in locations that are easily accessible to employees and visitors. The location of such storage areas shall be clearly labeled on future Site Plans. This

² The use of HET and EPA Certified WaterSense labeled faucets will result in a 30% reduction in water use from BAU conditions. Based on the LEED ® for New Construction Reference Guide, the typical flowrate for a water closet is 1.6 gallons per flush, for a low-flow water closet the flowrate is 1.1 gallons per flush which is an approximate 30% reduction in water usage. Additionally, a conventional kitchen sink has a flowrate of 2.5 gallons per minute and a conventional shower has a flowrate of 2.5 gallons per minute; the low-flow kitchen sink has a flowrate of 1.8 gallons per minute and the low-flow shower has a flowrate of 1.8 gallons per minute this is an approximate 28% reduction in water usage.

will reduce the amount of waste generated by building occupants and hauled to and disposed of in landfills³.

- For site lighting, the project's power density shall be more efficient than required by Title 24 as specified by LEED Energy & Atmosphere Credit 1. The amount of GHG reductions shall be calculated for the specific site lighting elements proposed as a part of future site plans pursuant to this standard, and shall be documented in the Greenhouse Gas Emissions Inventory Analysis report.
- For warehouse lighting, use T5HO lighting fixtures providing that general lighting will be more efficient than required by Title 24 as specified by LEED Energy & Atmosphere Credit 1. The amount of GHG reductions shall be calculated for the specific warehouse lighting elements proposed as a part of future site plans pursuant to this standard, and shall be documented in the Greenhouse Gas Emissions Inventory Analysis report.
- Install motion sensors on office lighting so that efficiency will be more efficient than required by Title 24 as specified by LEED Energy & Atmosphere Credit 1. The amount of GHG reductions shall be calculated for the specific motion sensors proposed as a part of future site plans pursuant to this standard, and shall be documented in the Greenhouse Gas Emissions Inventory Analysis report.
- Install skylights and energy efficient lighting that exceeds California Title 24 standards where feasible, including electronic dimming ballasts and computer-controlled daylight sensors for office lighting.
- Install exterior signage, traffic, and other outdoor lighting that utilizes light-emitting diode (LED) lighting that is approximately 70 percent more efficient than fluorescent signage.
- Use light colored "cool" roofs, cool pavements, and strategically placed shade trees.
- Require orientation of buildings to maximize passive solar heating during cool seasons, avoid solar heat gain during hot periods, enhance natural ventilation, and promote effective use of daylight. Building orientation, wiring, and plumbing should optimize and facilitate opportunities for on-site solar generation and heating.
- Limit the hours of operation of outdoor lighting as specified to meet LEED Energy & Atmosphere Credit 1.
- Install the photovoltaic cells (solar panels) or "thin film" on roofs and parking lots (which can provide added benefits of shading vehicles) as specified by LEED Energy & Atmosphere Credit 2 to off-set the Project's energy consumption. If the energy conservation measures implemented do not reduce GHG emissions by 25%, solar panels shall be installed to fulfill the remainder of the 25% requirement.

The Greenhouse Gas Emissions Inventory Analysis report shall only give emission reduction credits to those design features that are depicted on Site Plans or where evidence of compliance can otherwise be provided to the County DPLU. Approval of

³ This measure is consistent with the County of San Diego's Recycling Ordinance (Section 68.501 et seq. of the San Diego County Code of Regulatory Ordinances). Since the County's Recycling Ordinance exceeds the requirements of Title 24, GHG emission reductions above and beyond Title 24 requirements may be credited towards the Project's requirement to achieve a 25% reduction in emissions.

future Site Plans and/or construction permits shall not occur until it can be assured that the design features described in the Greenhouse Gas Emissions Inventory Analysis report (or other measures meeting the performance criteria specified above) have been depicted on the Site Plan or construction drawings, or if it can otherwise be demonstrated that the design features will be incorporated into the proposed development.

Documentation: The applicant shall prepare the Site Plans pursuant to this mitigation measure and in accordance with DPLU Form #506, *Applicant's Guide to Site Plan*. The applicant shall submit the Site Plans to the Department of Planning and Land Use, along with all applicable review fees and deposits, along with evidence of compliance with Option 1 or 2, as specified above. **Timing:** Pursuant to Section 3.3.1 of the EOMSP, review for compliance with this mitigation measure shall occur prior to approval of future Site Plans for the site. **Monitoring:** The Department of Planning and Land Use shall review the Site Plans for conformance with this mitigation measure.

7.1.2 Biological Resources

A. Mitigation Measures from the EOMSP Final EIR

Mitigation measures were identified by the EOMSP Final EIR (1994) to address impacts to biological resources resulting from long-term development of the EOMSP area. These mitigation measures included, in part, the following:

- *Preserve 100% of the J-22 complex (including watershed; provide buffers. Preserve 100% of occupied vernal pools, if possible.*
- *Participation in NCCP [sic] involving on-site preservation of large portions of coastal sage scrub habitat.*
- *Incorporate 90% of Stipa on-site into designated open space and maintain a corridor between preserved grassland habitat and the foothills to the east. Retain some non-native grassland along the US-Mexico border as foraging habitat, if possible.*
- *Preserve drainages and incorporate buffers for 13 acres of wetlands.*

B. Project-Specific Mitigation for Impacts to Biological Resources

M-BI-1: VARIEGATED DUDLEYA TRANSLOCATION: [DPW] [Grading Permit]

Intent: In order to mitigate for the impacts to variegated dudleya, which is a sensitive biological resource pursuant to the Biological Mitigation Ordinance (BMO), salvage and translocation of on-site populations shall occur. **Description of Requirement:** Impacts to 3,465 individuals of variegated dudleya shall be mitigated through the salvage and translocation of the on-site populations. The variegated dudleya shall be salvaged and translocated to the Lonestar Parcels and incorporated into the vernal pool and vernal pool watershed creation and restoration effort required pursuant to Mitigation Measure M-BI-7a, as documented in the Biological Technical Report prepared by HELIX Environmental Planning, Inc. (HELIX) dated June 23, 2010. Salvage and translocation shall occur in accordance with the Project's Vernal Pool Preserve Restoration Plan prepared by HELIX (July 2, 2010. **Documentation:** The applicant shall provide evidence that translocation activities have commenced in a manner consistent with the rare plant salvage and translocation sections of the Vernal Pool Preserve Restoration Plan. **Timing:** Prior to the issuance of on-site grading or clearing permits, the applicant shall commence

- implementation of the salvage and translocation sections of the Vernal Pool Preserve Restoration Plan. **Monitoring:** The Department of Planning and Land Use shall review the documentation for conformance with this condition and the approved Vernal Pool Preserve Restoration Plan.
- M-BI-2: **SAN DIEGO BUTTON-CELERY TRANSLOCATION: [DPW] [Grading Permit]**
Intent: In order to mitigate for the impacts to San Diego button-celery, which is a sensitive biological resource pursuant to the Biological Mitigation Ordinance (BMO), salvage and translocation of on-site populations shall occur. **Description of Requirement:** Impacts to three San Diego button-celery individuals shall be mitigated through the salvage and translocation of the on-site populations. The San Diego button-celery shall be salvaged and translocated to the Lonestar Parcels and incorporated into the vernal pool and vernal pool watershed creation and restoration effort required pursuant to Mitigation Measure M-BI-7a, as documented in the Biological Technical Report prepared by HELIX Environmental Planning, Inc. (HELIX) dated June 23, 2010. Salvage and translocation shall occur in accordance with the Project's Vernal Pool Preserve Restoration Plan prepared by HELIX (July 2, 2010). **Documentation:** The applicant shall provide evidence that translocation activities have commenced in a manner consistent with the rare plant salvage and translocation sections of the Vernal Pool Preserve Restoration Plan. **Timing:** Prior to the issuance of on-site grading or clearing permits, the applicant shall commence implementation of the salvage and translocation sections of the Vernal Pool Preserve Restoration Plan. **Monitoring:** The Department of Planning and Land Use shall review the documentation for conformance with this condition and the approved Vernal Pool Preserve Restoration Plan.
- M-BI-3: **SPREADING NAVARRETIA TRASNLOCATION: [DPW] [Grading Permit]**
Intent: In order to mitigate for the impacts to spreading navarretia, which is a sensitive biological resource pursuant to the Biological Mitigation Ordinance (BMO), salvage and translocation of on-site populations shall occur. **Description of Requirement:** Impacts to three individuals of spreading navarretia shall be mitigated through the salvage and translocation of the on-site populations. The spreading navarretia shall be salvaged and translocated to the Lonestar Parcels and incorporated into the vernal pool and vernal pool watershed creation and restoration effort required pursuant to Mitigation Measure M-BI-7a, as documented in the Biological Technical Report prepared by HELIX Environmental Planning, Inc. (HELIX) dated June 23, 2010. Salvage and translocation shall occur in accordance with the Project's Vernal Pool Preserve Restoration Plan prepared by HELIX (July 2, 2010). **Documentation:** The applicant shall provide evidence that translocation activities have commenced in a manner consistent with the rare plant salvage and translocation sections of the Vernal Pool Preserve Restoration Plan Plan. **Timing:** Prior to the issuance of on-site grading or clearing permits, the applicant shall commence implementation of the salvage and translocation sections of the Vernal Pool Preserve Restoration Plan. **Monitoring:** The Department of Planning and Land Use shall review the documentation for conformance with this condition and the approved Vernal Pool Preserve Restoration Plan.
- M-BI-4: **SAN DIEGO BARREL CACTUS TRANSLOCATION: [DPW] [Grading Permit]**
Intent: In order to mitigate for the impacts to San Diego barrel cactus, which is a sensitive biological resource pursuant to the Biological Mitigation Ordinance (BMO), salvage and translocation of on-site populations shall occur. **Description of**

Requirement: Prior to the issuance of grading or clearing permits, impacts to 31 San Diego barrel cactus individuals shall be mitigated through the salvage and translocation of the on-site populations. The San Diego barrel cactus individuals shall be salvaged and translocated to the Lonestar Parcels and incorporated into the vernal pool and vernal pool watershed creation and restoration effort required pursuant to Mitigation Measure M-BI-7a, as documented in the Biological Technical Report prepared by HELIX Environmental Planning, Inc. (HELIX) dated June 23, 2010. Salvage and translocation shall occur in accordance with the Project's Vernal Pool Preserve Restoration Plan prepared by HELIX (July 2, 2010). **Documentation:** The applicant shall provide evidence that translocation activities have commenced in a manner consistent with the Sensitive rare plant salvage and translocation sections of the Vernal Pool Preserve Restoration Plan. **Timing:** Prior to the issuance of on-site grading or clearing permits, the applicant shall commence implementation of the salvage and translocation sections of the Vernal Pool Preserve Restoration Plan. **Monitoring:** The Department of Planning and Land Use shall review the documentation for conformance with this condition and the approved Vernal Pool Preserve Restoration Plan.

M-BI-5: SAN DIEGO MARSH-ELDER TRANSLOCATION: [DPW] [Grading Permit]

Intent: In order to mitigate for the impacts to San Diego marsh-elder, which is a sensitive biological resource pursuant to the Biological Mitigation Ordinance (BMO), salvage and translocation of on-site populations shall occur. **Description of Requirement:** Prior to the issuance of grading or clearing permits, all eleven (11) San Diego marsh-elder plants within the Project's impact area shall be salvaged and stored in a nursery. As required by San Diego Marsh-elder Translocation Plan prepared by HELIX (July 2, 2010), immediately following the completion of grading of the site, the eleven individuals must be translocated to the realigned drainage channel on-site. If the salvaged plants do not survive the collection, storage, and transplantation, they will be replaced by container stock grown from local sources. Translocation shall occur in a manner consistent with the approved San Diego Marsh-Elder Translocation Plan prepared by HELIX (July 2, 2010). **Documentation:** The applicant shall provide evidence that translocation activities have commenced in a manner consistent with the San Diego Marsh-elder Translocation Plan. **Timing:** Prior to the issuance of on-site grading or clearing permits, the applicant shall commence implementation of the San Diego Marsh-elder Translocation Plan. **Monitoring:** The Department of Planning and Land Use shall review the documentation for conformance with this condition and the approved San Diego Marsh-elder Translocation Plan.

M-BI-6: Mitigation Measure M-BI-20 shall apply.

M-BI-7a: VERNAL POOLS: [DPW] [Grading Permit]

Intent: In order to mitigate for impacts to 0.14 acre of vernal pools and 0.10 acre of road pools containing Riverside or San Diego fairy shrimp, which are sensitive resources pursuant to the Biological Mitigation Ordinance (BMO), vernal pool preservation, restoration, and creation shall occur. **Description of Requirement:** Prior to the issuance of grading or clearing permits, mitigation for impacts to 0.14 acre of vernal pools and 0.10 acre of road pools containing Riverside or San Diego fairy shrimp shall occur in conformance with the Project's Vernal Pool Preserve Restoration Plan prepared by HELIX (July 2, 2010), and shall include preservation, restoration, and creation within Otay Mesa on the Lonestar Parcels. The Lonestar parcels contain 68.72 acres of

vegetation (mostly non-native grassland) designated as San Diego Fairy Shrimp Critical Habitat. The Project applicant shall preserve the existing 0.66 acre area with vernal pools and road pools occupied with fairy shrimp, and shall also create/restore an additional 0.41 acre of vernal pools within the Lonestar Parcels. Additionally, the mitigation shall include the restoration of approximately 4.50 acres of vernal pool watersheds. The restoration area shall be temporarily fenced with three-strand non-barbed wire until the area meets success criteria. **Documentation:** The applicant shall prepare a Vernal Pool Preserve Restoration Plan in conformance with the approved Off-Site Resource Management Plan dated June 23, 2010. Upon approval of the plan, the applicant shall enter into a secured agreement for the plan's implementation. **Timing:** Prior to the issuance of grading or clearing permits, the applicant shall commence implementation of the Vernal Pool Preserve Restoration Plan. **Monitoring:** The Department of Planning and Land Use shall review the Vernal Pool Restoration Plan for conformance with this condition and the approved Resource Management Plan for the Off-Site Biological Open Space at Lonestar Ridge, prepared by HELIX (June 23, 2010).

M-BI-7b: **VERNAL POOL PROPAGATION: [DPW] [Grading Permit]**

Intent: In order to mitigate for impacts to 0.14 acre of vernal pools and 0.10 acre of road pools containing Riverside or San Diego fairy shrimp, which are sensitive resource pursuant to the Biological Mitigation Ordinance (BMO), the preserved/created/restored vernal pool habitat required pursuant to Mitigation Measure M-BI-6a shall be propagated with soil containing San Diego and Riverside fairy shrimp cysts. **Description of Requirement:** As a component of the Vernal Pool Preserve Restoration Plan required pursuant to mitigation measure M-BI-7a, requirements for salvaging soil from the impacted pools on- and off-site and translocating those soils to the created/restored pools shall be included. The plan shall require the inoculation of created/restored pools with San Diego and Riverside fairy shrimp at a 3:1 ratio (totaling a minimum of 0.72 acre), in accordance with the Project's Vernal Pool Preserve Restoration Plan, dated July 2, 2010. **Documentation:** The Project applicant shall prepare and submit a Vernal Pool Preserve Restoration Plan for the Lonestar site which includes requirements for translocating soil from impacted vernal and road pools. Upon approval of the plan, the applicant shall enter into a secured agreement for the plan's implementation. **Timing:** Prior to the issuance of grading or clearing permits, the applicant shall commence implementation of the Vernal Pool Preserve Restoration Plan. **Monitoring:** The Department of Planning and Land Use shall review the Vernal Pool Preserve Restoration Plan for conformance with this condition and the approved Resource Management Plan for the Off-Site Biological Open Space at Lonestar Ridge, prepared by HELIX (June 23, 2010).

M-BI-8: Mitigation Measures M-BI-7a and M-BI-7b shall apply.

M-BI-9: **QUINO CHECKERSPOT BUTTERFLY: [DPW] [Grading Permit]**

Intent: In order to mitigate for impacts to the Quino checkerspot butterfly, which is a sensitive biological resource pursuant to the Biological Mitigation Ordinance (BMO), habitat-based mitigation shall occur. **Description of Requirement:** Impacts to the Quino checkerspot butterfly shall be mitigated through the preservation of historically occupied habitat on the Lonestar Parcels, which has been designated as Quino checkerspot butterfly Critical Habitat. Additionally, host plant species and adequate nectar plants shall be included in the vernal pool watershed restoration efforts. The resulting mitigation shall provide for improved habitat value on these historically

occupied parcels for the Quino checkerspot butterfly. **Documentation:** The Vernal Pool Preserve Restoration Plan required pursuant to mitigation measure M-BI-7a shall include provisions for providing host plant species and adequate nectar plants in the vernal pool watershed restoration efforts. Upon approval of the plan, the applicant shall enter into a secured agreement for the plan's implementation. In addition, the applicant shall provide evidence that the habitat at the Lonestar Parcels has been acquired and conserved in conformance with the Project's Resource Management Plan for the Off-Site Biological Open Space at Lonestar Ridge, prepared by HELIX (June 23, 2010). **Timing:** Prior to the issuance of grading or clearing permits, the applicant shall commence implementation of the Vernal Pool Preserve Restoration Plan. **Monitoring:** The Department of Planning and Land Use shall review the Vernal Pool Preserve Restoration Plan for conformance with this condition and the approved Resource Management Plan for the Off-Site Biological Open Space at Lonestar Ridge (June 23, 2010). In addition, the Department of Planning and Land Use shall verify that habitat at the Lonestar Parcels has been acquired and preserved in accordance with the Project's Resource Management Plan for the Off-Site Biological Open Space at Lonestar Ridge (June 23, 2010).

M-BI-10: Mitigation Measure M-BI-20 shall apply.

M-BI-11a: **BRUSHING, GRADING, AND CLEARING RESTRICTIONS: [DPW] [Grading Permit]**

Intent: In order to mitigate for potential indirect impacts to breeding or nesting birds, including raptors and the burrowing owl that could occur during brushing, grading, and clearing activities. **Description of Requirement:** All brushing, grading, and clearing of vegetation shall occur outside of the bird breeding season (February 15 through August 31). **Timing:** Restrictions on the timing of brushing, grading, and clearing activities shall be listed on the Grading Permit prior to its approval. **Documentation:** The DPW shall ensure that the grading permit includes a note prohibiting construction activities during the breeding season. **Monitoring:** The DPW shall ensure that a note prohibiting brushing, grading, or clearing activities during the breeding season is included on the Grading Permit.

M-BI-11b **BRUSHING, GRADING, AND CLEARING RESTRICTIONS: [DPW] [Grading Permit]**

Intent: In order to mitigate for potential indirect impacts to the burrowing owl that could occur during brushing, grading, and clearing activities. **Description of Requirement:** A pre-construction survey shall be conducted to identify the known active burrows. Weed removal (by whacking, bush hogging, or mowing) shall be conducted as part of the pre-construction survey, under the guidance of a qualified biological monitor, to make all potential burrows more visible and to avoid injuring owls by burrow collapse. If owls are present in the burrows, a qualified biologist shall implement passive relocation measures (installation of one-way doors) in accordance with CDFG regulations (CDFG 1995). Once all owls have vacated the burrows (approximately 48 hours), a qualified biologist shall oversee the excavation and filling of the burrows. **Timing:** A pre-construction survey shall occur no more than 7 days prior to commencement of brushing, grading, or clearing activities to determine the presence or absence of burrowing owls. **Documentation:** The applicant shall prepare a pre-construction survey of areas proposed for clearing, brushing, or grading no more than 7 days prior to the commencement of such activities. If owls are determined to be present within the burrows, the applicant

shall document passive relocation measures undertaken to preclude direct impacts to burrowing owl individuals, and the Project biologist shall certify that all owls have vacated any occupied burrows. **Monitoring:** The DPW shall ensure that a note requiring pre-construction surveys prior to brushing, grading, and clearing activities is included on the grading permit. The DPLU shall review the pre-construction survey results, along with evidence of any passive relocation measures, to ensure compliance with these requirements.

M-BI-11c: CONSTRUCTION RESTRICTIONS: [DPW] [Improvement Plans and Building Permits]

Intent: In order to mitigate for potential indirect impacts to breeding or nesting birds, including raptors and the burrowing owl that could be impacted by construction activities. **Description of Requirement:** Construction noise may not exceed 60 dB L_{eq} at any raptor or burrowing owl nest site. A pre-construction survey shall be conducted by a County-approved biologist to determine whether construction activities are located within 300 feet of burrowing owl burrows or within 800 feet of ground dwelling raptor nests. Construction activities may not proceed within 300 feet of active burrowing owl burrows or within 800 feet of active ground dwelling raptor nests. This limitation may only be waived by the Director of DPLU if a noise report by a County-approved noise consultant certifies that noise levels would not exceed 60 dB L_{eq} at the nest site. If the noise report determines that noise mitigation measures such as noise barriers are necessary to bring noise levels to below 60 dB L_{eq} at the nest site(s), they shall be installed prior to starting construction. **Timing:** These restrictions shall be documented on all Project improvement plans and building permits. Pre-construction surveys shall occur no more than 7 days prior to construction activities. If noise barriers or other noise mitigation measures are required, such measures shall be installed prior to commencement of any construction activities which occur within 300 feet of burrowing owl burrows or 800 feet of ground dwelling raptor nests. **Documentation:** The DPW shall ensure that improvement plans and building permits include a note documenting these requirements. The applicant shall prepare a pre-construction survey no more than 7 days prior to the commencement of construction activities to determine whether construction activities are proposed within 300 feet of burrowing owl burrows or 800 feet of ground dwelling raptor nests. If construction activities are proposed within 300 feet of burrowing owl burrows or 800 feet of ground dwelling raptor nests, the applicant shall provide a noise report prepared by a County-approved noise consultant specifying what mitigation measures, if any, are required to bring the noise level at the nest site(s) below 60 dB L_{eq} . If noise mitigation measures are required, the applicant shall provide evidence (e.g., photos) that demonstrates that the measures have been undertaken in accordance with the noise report. **Monitoring:** The DPW shall review improvement plans and building permits to ensure that the required notes have been included on the plans. The DPLU shall review the pre-construction survey, noise report, and evidence that noise minimization measures have been undertaken to ensure that the requirements specified by this measure have been adhered to.

M-BI-11d: BURROWING OWL: [DPW] [Grading Permit]

Intent: In order to mitigate for impacts to burrowing owl habitat, artificial burrows shall be created in the off-site mitigation areas. **Description of Requirement:** As a component of the Vernal Pool Preserve Restoration Plan required pursuant to M-BI-7a, a plan for providing artificial burrows in the vernal pool watershed restoration areas shall

be included. **Documentation:** The Vernal Pool Preserve Restoration Plan required pursuant to mitigation measure M-BI-7a shall include provisions for providing artificial burrows for the burrowing owl in the vernal pool watershed restoration efforts. Upon approval of the plan, the applicant shall enter into a secured agreement for the plan's implementation. **Timing:** Prior to the issuance of grading or clearing permits, the applicant shall commence implementation of the Vernal Pool Preserve Restoration Plan. **Monitoring:** The Department of Planning and Land Use shall review the Vernal Pool Preserve Restoration Plan for conformance with this condition and the approved Resource Management Plan for the Off-Site Biological Open Space at Lonestar Ridge (dated June 23, 2010).

M-BI-12 Mitigation Measure M-BI-20 shall apply.

M-BI-13: Mitigation Measure M-BI-20 shall apply.

M-BI-14: Mitigation Measure M-BI-20 shall apply.

M-BI-15: Mitigation Measure M-BI-20 shall apply.

M-BI-16: Mitigation Measure M-BI-20 shall apply.

M-BI-17a: **FUGITIVE DUST: [DPW] [Grading Permit]**

Intent: In order to mitigate for indirect impacts to local wildlife due to fugitive dust, watering of unpaved surfaces shall occur during grading activities. **Description of Requirement:** Potential indirect impacts to local wildlife caused by fugitive dust shall be mitigated by requiring that active construction areas and unpaved surfaces be watered per County standards to reduce potential indirect impacts caused by fugitive dust. **Documentation:** Ensure that a note is included on Project grading plans indicating a requirement to water unpaved surfaces in accordance with County standards. **Timing:** Prior to approval of grading or clearing permits, the note shall be included on the Grading Plans. **Monitoring:** The Permit Compliance Engineer (as defined in Section 87.420 of the County Grading Ordinance) shall provide documentation/evidence of compliance with each note in the regular reports required pursuant to Section 87.420(a) of the County's Grading Ordinance.

M-BI-17b: Mitigation Measure 11c shall apply.

M-BI-17c: **ERRANT CONSTRUCTION IMPACTS: [DPLU] [Grading Permit]**

Intent: In order to prevent errant grading or clearing beyond the proposed construction limits that could impact sensitive vegetation communities or species intended for preservation. **Description of Requirement:** Orange construction fencing shall be installed around the approved limits of impacts to define the grading boundaries and prevent unintended impacts. **Documentation:** Grading plans shall include a note documenting this requirement. **Timing:** Prior to approval of grading or clearing permits, the note shall be included on the Grading Plans. **Monitoring:** The Permit Compliance Engineer (as defined in Section 87.420 of the County Grading Ordinance) shall provide documentation/evidence of compliance with each note in the regular reports required pursuant to Section 87.420(a) of the County's Grading Ordinance.

M-BI-17d: INVASIVE PLANT SPECIES: [DPLU] [Grading Permit, Site Plan]

Intent: In order to prevent intrusion of invasive plant species into adjacent open space areas on- and off-site, final landscaping plans shall exclude any invasive plant species. **Description of Requirement:** The Department of Planning and Land Use shall review final landscaping plans for the site to ensure that the proposed landscaping elements are consistent with the landscaping requirements specified on the approved Conceptual Landscape Plan and to verify that landscaping elements adhere to the requirements of the MSCP Adjacency Guidelines and do not include any of the invasive plant species included on the Cal-IPC List A. **Documentation:** The applicant shall prepare final landscaping plans in conjunction with grading permits and future site plans in a manner consistent with the approved Conceptual Landscape Plan. The Final Landscape Plans shall demonstrate that no prohibited plant species are proposed on- or off-site. **Timing:** Prior to the issuance of grading permits and future site plans, a landscaping plan that does not include invasive plant species shall be approved by the Planning and Building Department. **Monitoring:** The [DPLU, LA] shall review proposed final landscaping plans to ensure conformance with the MSCP Adjacency Guidelines and to verify that no invasive plant species included on the Cal-IPC List A are proposed.

M-BI-18: Mitigation Measure M-BI-7a shall apply.

M-BI-19: FRESHWATER MARSH MITIGATION: [DPW] [Grading Permits, Final Grading Inspection]

Intent: In order to mitigate for Project impacts to 0.01 acre of freshwater marsh habitat off-site, habitat credits shall be purchased from an off-site mitigation bank. **Description of Requirement:** The Project applicant shall purchase habitat credits for 0.03 acre of freshwater marsh habitat from the Rancho Jamul Mitigation Bank. **Documentation:** The applicant shall provide the DPLU with evidence that habitat credits for 0.03 acre of freshwater marsh habitat have been purchased from the Rancho Jamul Mitigation Bank. **Timing:** Prior to issuance of grading permits, the applicant shall provide the DPLU with evidence that adequate habitat credits have been purchased. **Monitoring:** The DPLU shall review the evidence provided by the applicant to ensure that the habitat preservation efforts have been completed prior to final grading inspection.

M-BI-20: GRASSLAND PRESERVATION AND RESTORATION: [DPLU] [Grading Permits]

Intent: In order to mitigate impacts to 0.19 acre of saltgrass grassland and 163.41 acres of non-native grassland, on- and off-site preservation and restoration of habitat shall occur. **Description of Requirement:** Impacts to 0.19 acre of saltgrass grassland shall be mitigated at a ratio of 2:1 for a total of 0.38 acre within the upland/watershed restoration area proposed around the restored vernal pools on the Lonestar Parcels. In addition, impacts to 163.41 acres of non-native grassland shall be mitigated at an approximate 1:1 ratio, which is greater than the typical 0.5:1 ratio because it is occupied habitat for the burrowing owl. It should be noted that a portion of the Project's impacts (between 18.0-21.9 acres of non-native grassland, depending on ultimate alignment of sewer infrastructure, and 0.1 acre of native grassland) would overlap with impacts proposed as part of the Otay Crossings project. Should the Otay Crossings project implement required mitigation for the 18.0-21.9 acres of non-native grassland and 0.1 acre of native grassland prior to implementation of the proposed Project, the Project's total required mitigation acreage shall be reduced accordingly.

The Project's required mitigation for impacts to native and non-native grasslands shall be accomplished through preservation and restoration. The mitigation program approved by the County and wildlife agencies requires at least half of the mitigation for non-native grassland to occur within the mesa and allows the remainder to occur outside of the mesa. As a result, the approximate 1:1 non-native grassland mitigation ratio would be split, with approximately half of the required mitigation (79.45 acres) occurring on mesa and the remainder (81.70 acres) occurring off mesa. Mitigation for native grassland would occur entirely within the mesa. The required mitigation shall include the following:

- 67.65 acres of grassland mitigation would be achieved with the preservation of habitat within the Lonestar Parcels, as required pursuant to Mitigation Measure M-BI-7a. As a component of the required mitigation, 0.38 acre of saltgrass grassland would be incorporated into the upland/watershed restoration around the restored vernal pools. This measure would fully achieve the mitigation requirements for impacts to native grassland along with portions of the mitigation requirement for non-native grassland.
- Prior to final grading inspection, 2.98 acres within the proposed realigned drainage channel in the southeastern portion of the proposed Project site shall be vegetated with grassland species. This area shall not include the northern portion of the realigned drainage channel or the locations where riprap is proposed to be installed. Developed habitat in this area consists of decomposed granite spread out over an existing dirt road. The decomposed granite shall be removed and the underlying area will be allowed to revegetate as non-native grassland. Disturbed habitat shall remain as is. Fencing will be constructed along the outside edge of the drainage channel where it abuts proposed development (as required pursuant to Mitigation Measure M-BI-17d).
- In addition, prior to Final Map recordation, approximately 81.70 acres of grassland mitigation shall be achieved off mesa at a location to be approved by the County and the Wildlife Agencies.

Documentation: Final On-Site and Off-Site Resource Management Plans shall be prepared to identify a Resource Manager and long-term funding source for the on-mesa mitigation sites (i.e., on-site and within the Lonestar Parcels), and shall include all of the on-mesa requirements specified by this measure. The applicant shall prepare a Draft and Final Resource Management Plan documenting off-mesa preservation requirements in conformance with this condition, which shall identify a Resource Manager and long-term funding for the off-mesa site. Upon approval of the final plans, the applicant shall enter into a secured agreement for the plans' implementation. **Timing:** The 2.98 acres in the southeastern corner of the Project site shall be placed in a conservation easement prior to Final Map recordation for Unit 1 of the proposed Project. Prior to Final Map recordation, all on- and off-site Final Resource Management Plans shall be approved. **Monitoring:** The DPLU shall review the Final Resource Management Plans for compliance with this condition and the Conceptual On- and Off-Site Resource Management Plans (both dated June 23, 2010).

M-BI-21a: Mitigation Measure M-BI-20 shall apply.

M-BI-21b: **LIMITED BUILDING ZONE EASEMENT: [DPW] [FINAL MAP]**

Intent: To preclude potential impacts to the on-site biological open space area during long term operation of the Project due to fuel modification activities, a limited building zone easement shall be placed on a portion of the Project site. **Description of Requirement:** A limited building zone easement shall be granted to the County of San Diego over the portions of Lots 47, 48, 49, 50, 51, 52, 53 and 58 that are located within 40 feet of the realigned drainage channel (Tentative Map Lot “C”). The easement shall prohibit the construction of habitable structures within the limited building zone so as to ensure that the Project’s required 40-foot fuel modification zone occurs outside of the realigned drainage. **Documentation:** The Department of Public Works shall ensure that the Final Map includes a note which documents the requirements of the Limited Building Zone Easement. The limits of the Limited Building Zone Easement shall also be delineated on the Final Map. **Timing:** Prior to recordation of the Final Map for Unit 3 that includes Lots 47, 48, 49, and 50 of Tentative Map 5505 and prior to the recordation of the Final Map for Unit 4 that includes Lots 51, 52, 53 and 58 of Tentative Map 5505. **Monitoring:** The Department of Public Works shall review the Final Maps for Unit 3 and Unit 4 for conformance with this mitigation measure.

M-BI-22a: **NON-WETLAND WATERS: [DPLU] [Grading Permits, Final Grading Inspection]**

Intent: In order to mitigate for impacts to 0.19 acre of unvegetated non-wetland waters of the U.S. and 0.01 acre of ephemeral pond, a combination of creation, restoration, and preservation shall occur. **Description of Requirement:** Impacts to 0.19 acre of unvegetated non-wetland waters of the U.S. (ephemeral streambed) and 0.01 acre of ephemeral pond shall be mitigated through a combination of the following: creation of 0.20 acre of ephemeral, non-wetland Waters of the U.S. within the realigned drainage channel on-site; preservation of 0.20 acre of ephemeral drainages on the Lonestar Parcels; and restoration of 0.40 acre of non-wetland Waters of the U.S. within the Rancho Jamul Wetland Mitigation Bank, in conformance with the terms and conditions of the Corps 404 Nationwide Permit and the RWQCB 401 Water Quality Certification for the Project. **Documentation:** The Project applicant shall provide documentation demonstrating compliance with this condition and the terms and conditions of the Corps 404 Nationwide Permit and the RWQCB 401 Water Quality Certification for the Project. **Timing:** Prior to the issuance of grading permits, the preservation and restoration efforts off-site shall commence. Prior to final grading inspection, the on-site creation of habitat shall be completed. **Monitoring:** The DPLU shall review the documentation for conformance with this condition.

M-BI-22b: Mitigation measure M-BI-7a shall apply.

M-BI-22c: Mitigation Measure M-BI-21b shall apply.

M-BI-23: Mitigation Measures M-BI-7a and M-BI-20 shall apply.

7.1.3 Mitigation for Impacts to Cultural Resources

A. Mitigation Measures from the EOMSP Final EIR

- 4A. *Testing of all untested or unevaluated sites will be conducted prior to approval of any subsequent discretionary permits. Sites determined to be important after testing will be preserved in open space easements or will be subject to additional testing, or both.*

Impacts to sites determined not to be important will be considered to be adequately mitigated after the testing phase.

- 4B. *Prior to approval of any discretionary permits in the 400 acre area not yet surveyed due to agricultural constraints, a cultural resource survey shall be conducted by a qualified archaeologist in accordance with the County of San Diego Archaeological/Historical Report Procedures.*
- 4C. *For sites determined to be important after testing, alternate means of achieving mitigation shall be pursued. These include, but are not limited to, the following:*
 - 1. *Site avoidance by preservation through capping the site with a layer of sterile fill and placing landscaping on top.*
 - 2. *Dedication of open space easements to protect the resources.*
 - 3. *Additional data recovery by implementation of an excavation and analysis program.*
 - 4. *A combination of one or more of the above measures or additional measures, as appropriate.*
- 4D. *Any additional survey, testing, or excavation and analysis must be conducted by a qualified archaeologist, in accordance with the San Diego County Archaeological/Historical Report Procedures. Work to be conducted will include the field work, literature review, analysis of artifacts, preparation of a research design prior to commencement of field work, and the preparation of a report describing the results, with recommendations for mitigation of impacts.*
- 4E. *All cultural resource work shall be conducted in accordance with the East Otay Mesa Cultural Resource Management Plan, prepared by Ogden Environmental and Gallegos Associates, dated October 1993.*
- 4F. *Site preservation shall be the preferred mitigation strategy for cultural resources.*

B. Project-Specific Mitigation for Cultural Resources Impacts

M-CR-1a DATA RECOVERY PROGRAM [DPLU] [Grading Permit, Clearing Permit]

Intent: In order to mitigate impacts to Site SDI-11,799/H, SDI-8081, and SDI-17,963, which are evaluated as significant resources pursuant to Section 15064.5 of the State CEQA Guidelines, data recovery shall occur. **Description of Requirement:** A Data Recovery Program shall be prepared which mitigates impacts to Site SDI-11,799/H, SDI-8081, and SDI-17,963. The Data Recovery Program shall adhere to the General Mitigation Procedures for Data Recovery, as identified in the site-specific cultural resources investigation (EIR Technical Appendix D) and summarized below:

General Mitigation Procedures for Data Recovery:

Data recovery is commonly discussed in terms of sampling percentages, referring to the percent of the area of the significant subsurface deposit that will be excavated. The general approach for achieving the mitigation of impacts through data recovery will begin with an indexing of the site. The site index will include a sufficient sample of the subsurface deposit, consisting of 3% of each deposit, to effectively stratify the

deposits into areas of differing artifact content, densities, and activity areas. The indexing process will utilize a static grid to cover each site, with a sample unit placed in each grid cell. Utilizing a grid will produce a very structured, non-random, and uniform index of the content of each cultural deposit. Within the portion(s) of each site that retains the greatest research potential, an additional 2% of that area will be excavated. For most sites in the data recovery program, the area excavated will be up to a total of 5% of the significant subsurface deposit (area of greater research potential). This volume of recovery will be sufficient to successfully pursue the research objectives of the research design, as well as to provide other researchers with a large information resource. At the sites considered to retain the greatest research potential, a third level of stratified sampling may be implemented to focus block excavations on areas that demonstrate intense artifact recovery, features, or multi-cultural depositional patterns.

The excavation of the subsurface deposits will be accomplished with standard one-meter-square test units excavated by hand in ten-centimeter levels. All units will be screened, mapped, measured, and photographed through standard stratigraphic control measures.

For the phases of work at each site, the first phase will be the site indexing and the second phase will be the focused investigation. A third phase, if warranted, would be extremely focused on high potential elements of any significant site. Each phase has specific goals: the site index is a non-random representative sample of the entire site, while the second and third phases will be a focused, biased and intuitive study of the area within the deposit that has the greatest potential.

For consistency, each site will be treated similarly, with an index phase followed by a focused, intuitive phase in the area of greatest importance. The phases of the sampling procedure to be used at the sites included in the data recovery program are:

Phase 1 The first phase of excavation at any particular site will typically involve a 3% sample used to index the site content and document intra-site variation. Test units will be uniformly distributed within each site using a grid system. For most sites, the presence of multiple rock outcroppings will constitute voids in the sample grid. These areas will be deleted from the calculations of site deposits when the data recovery programs are initiated; however, the areas represented by the outcrops cannot be calculated at this time.

Phase 2 The second phase of excavation will consist of up to 2% sample of each site area identified as representing the greatest research potential. The stratification of the site following the Phase 1 work will typically identify an area distinguished as retaining additional research potential. For this sampling phase, the test units would not be randomly placed, but would be intuitively located at the discretion of the archaeologist.

Phase 3 The last phase of excavation will be conducted at any sites that are found to contain particularly important deposits worthy of extended excavation.

The sample size of any such area is dependent on the nature of the deposit and research potential.

The procedures noted above will be applied to each of the on-site resources identified as significant pursuant to CEQA Guidelines Section 15126.2(d). The actual number of square meters to be excavated in any particular site will depend upon the site size, importance, and research potential. The projected size of the sample for each of the sites listed below is not a minimum or maximum, but an estimate of the sample needed to satisfy the data needs of the research objectives. The possibility exists that previously unidentified subsurface deposits will be identified during data recovery, increasing the research potential of a significant site. In this case, the sample size of the Phase 1 or Phase 2 excavations may be readjusted. At each site, a backhoe may be employed following the completed sampling program to search for any anomalies within the site. Trenches would be used to expose portions of the sites; however the number of trenches used in this type of investigation would be discussed and approved by the County before initiation.

Documentation: The applicant shall prepare the Data Recovery Program pursuant to this mitigation measure and shall submit it to the Department of Planning and Land Use. Upon approval of the plan, the applicant shall enter into a secured agreement for the Program's implementation. **Timing:** Prior to the approval of a grading or clearing plan or issuance of the grading or clearing permit, the Data Recovery Program shall be approved. **Monitoring:** The Department of Planning and Land Use shall review the Data Recovery Plan for conformance with this mitigation measure. Upon approval of the Program, a Director's decision of approval shall be issued to the applicant.

M-CR-1b SITE-SPECIFIC DATA RECOVERY PROGRAM [DPLU] [Grading Permit, Clearing Permit]

Intent: In order to mitigate impacts to Site SDI-11,799/H, which is evaluated as a significant historic resource pursuant to Section 15064.5 of the State CEQA Guidelines, data recovery shall occur. **Description of Requirement:** A Data Recovery Program shall be prepared which mitigates impacts to Site SDI-11,799/H. The Data Recovery Program shall be consistent with all requirements as documented in the site-specific cultural resources investigation (EIR Technical Appendix D) and as summarized below:

The sampling program for the site will focus on a uniform indexing of the significant areas of the site. This first level of index sampling will consist of a 3% sample of the 1,046 square meter deposit. This represents a sample of 31 square meters for the Phase 1 index. The proposed Phase 2 excavations are projected based on an area of increased research potential estimated to be approximately 2% of the 1,046 square meters; the exact number of Phase 2 excavations will depend on the results of the Phase 1 excavations. The proposed data recovery excavations are summarized as follows:

- Size of Subsurface Deposit — 1,046 square meters*
- Phase 1 — 3% sample of 31 test units*
- Phase 2 — 2% sample of the area of increased research potential resulting in the excavation of 21 test units. This total will vary*

depending on the stratification of the subsurface deposit into areas of greater research potential.

- *Total proposed sample size for data recovery — 52 square meters, representing approximately 5.0% of the areas of greatest research potential.*
- *A third phase of mitigation sampling is not likely at SDI-11,799H, as this site is not considered a candidate for intense historic artifact deposits associated with habitation of the area.*

Documentation: The applicant shall prepare a report demonstrating that the Data Recovery Program has been completed pursuant to this mitigation measure and shall submit it to the Department of Planning and Land Use. **Timing:** Prior to the approval of a grading or clearing plan or issuance of the grading or clearing permit, the Data Recovery Program shall be approved. **Monitoring:** The Department of Planning and Land Use shall review the final report for conformance with this mitigation measure.

M-CR-2a **DATA RECOVERY PROGRAM [DPLU] [Grading Permit, Clearing Permit]**

Intent: In order to mitigate for the potential to impact previously unknown historical and/or archaeological artifacts during Project grading and excavation activities, data recovery shall occur. **Description of Requirement:** The applicant shall contract with a County-approved archaeologist to implement a grading monitoring and data recovery program to the satisfaction of the Director of DPLU. This program shall include, but not be limited to the following actions:

1. The consulting archaeologist shall contract with a culturally-affiliated (Kumeyaay) Native American Observer to be involved with the grading monitoring program. The County-approved archaeologist/historian and Native American Observer shall attend the pre-grading meeting with the contractors to explain and coordinate the requirements of the monitoring program. DPLU shall approve all persons involved in the monitoring program prior to any pre-construction meetings.
2. During the original brushing and grading of previously undisturbed areas within the upper five (5) feet of soil, the archaeological monitor(s) and Kumeyaay Native American Observer shall be on site full-time to perform periodic inspections of the excavations. The frequency of inspections will depend on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features.
3. Isolates and clearly non-significant deposits will be minimally documented in the field and the monitored grading can proceed.
4. In the event that previously unidentified potentially significant cultural resources are discovered, the archaeologist shall have the authority to divert or temporarily halt ground disturbance operation in the area of discovery to allow evaluation of potentially significant cultural resources. The archaeologist shall contact the County Archaeologist at the time of discovery. The archaeologist, in consulting with the County Archaeologist, shall determine the significance of the discovered resource(s). The County Archaeologist must concur with the evaluation before construction activities will be allowed to resume in the affected area. For

significant cultural resources, a Research Design and Data Recovery Program to mitigate impacts shall be prepared by the consulting archaeologist and approved by the County Archaeologist, then carried out using professional archaeological methods.

5. Before construction activities are allowed to resume in the affected area, the artifacts shall be recovered and features recorded using professional archaeological methods. The archaeological monitor(s) and Kumeyaay Native American Observer shall determine the amount of material to be recovered for an adequate artifact sample for analysis.
6. In the event that previously unidentified cultural resources are discovered, all cultural material collected during the grading monitoring program shall be processed and curated according to current professional repository standards. The collections and associated records, including title, shall be transferred to an appropriate curation facility within San Diego County, to be accompanied by payment of the fees necessary for permanent curation.
7. In the event that previously unidentified cultural resources are discovered, a report documenting the field and analysis results and interpreting the artifact and research data within the research context shall be completed and submitted to the satisfaction of the Director of DPLU prior to the issuance of any building permits.
8. In the event that no cultural resources are discovered, a brief letter to that effect shall be sent to the Director of DPLU by the consulting archeologist that the grading monitoring activities have been completed.

Documentation: The applicant shall prepare a report demonstrating that the Data Recovery Program has been completed pursuant to this mitigation measure and shall submit it to the Department of Planning and Land Use. **Timing:** Prior to the approval of any grading or clearing plan or issuance of any grading or clearing permit, the Data Recovery Plan shall be approved. **Monitoring:** The Department of Planning and Land Use shall review the Data Recovery Plan for conformance with this mitigation measure. Upon approval of the Program, a Director's decision of approval shall be issued to the applicant.

M-CR-2b **DATA RECOVERY PLAN [DPLU] [Grading Inspection]**

Intent: In order to mitigate for the potential to impact previously unknown historical and/or archaeological artifacts during Project grading and excavation activities, data recovery shall occur. **Description of Requirement:** The applicant shall assure adequate data recovery and curation program. This program shall include, but not be limited to the following actions:

- A letter from a qualified curation facility shall be provided to the Director of Planning and Land Use acknowledging that all cultural materials excavated or removed from prehistoric or historic sites during testing and/or data recovery programs (except burial-related artifacts and unless otherwise required by law), along with associated project data, have been permanently curated at a San Diego facility that meets federal standards per 36 CFR Part 79, such as the San Diego Archaeological Center.

- Artifacts would be professionally curated and made available to other archaeologists/researchers for further study. All diagnostic historic artifacts will be curated along with any artifacts possessing educational or interpretive potential and artifacts expressing symbolic or heritage values to recognized ethnic descendents or social groups.
- Only artifacts from sites that have been determined to be not significant pursuant to CEQA may be sampled. A sample may be taken only in the event that nondescript bulk items such as glass or metal are recovered that do not contain long-term research value, and are in such great quantity that a sample will suffice. Any proposed sampling program must be approved by the County of San Diego and must meet the policy set forth by the State of California (1993). Cost for curation will be by the applicant or entity responsible for the impact. Interim curation during the analysis and report preparation will be by the project Consulting Archaeologist.

Documentation: The applicant shall prepare a letter report demonstrating that discovered artifacts would be curated pursuant to this mitigation measure. The letter report shall be submitted to the Department of Planning and Land Use. **Timing:** The applicant shall provide sufficient evidence prior to final grading inspection sign-off. **Monitoring:** The Department of Planning and Land Use shall review the letter report for conformance with this mitigation measure.

M-CR-3a Mitigation Measure CR-1a shall apply.

M-CR-3b **SITE-SPECIFIC DATA RECOVERY PROGRAM [DPLU] [Grading Permit, Clearing Permit]**

Intent: In order to mitigate impacts to Site SDI-8081, which is evaluated as a significant archaeological resource site pursuant to Section 15064.5 of the State CEQA Guidelines, data recovery shall occur. **Description of Requirements:** A Data Recovery Program shall be prepared which mitigates impacts to Site SDI-8081. The Data Recovery Program shall be consistent with all requirements as documented in the site-specific cultural resources investigation (EIR Technical Appendix D) and as summarized below:

The sampling program for the site will focus on a uniform indexing of the significant areas of the site. The first level of index sampling will consist of a 3% sample of the shell midden deposit. This represents a sample of seven square meters for the Phase 1 index. The proposed Phase 2 excavations are projected based on an area of increased research potential estimated to be approximately 2% or four square meters; the exact number of Phase 2 excavations will depend on the results of the Phase 1 excavations. The proposed data recovery excavations are summarized as follows:

- *Size of Subsurface Deposit — 219 square meters*
- *Phase 1 — 3% sample of 7 test units*
- *Phase 2 — 2% sample of the overall area of increased research potential, resulting in the excavation of 4 test units. The total number of units excavated during Phase 2 will vary depending on the stratification of the subsurface deposit into areas of greater research potential.*

- *Total proposed sample size for data recovery — 11 square meters, representing approximately 5.0% of the areas of greatest research potential.*
- *A third phase of mitigation sampling is not likely at SDI-8081, as this site is not considered a candidate for intense artifact deposits or substantial subsurface features.*

Documentation: The applicant shall prepare the Data Recovery Program pursuant to this mitigation measure and shall submit it to the Department of Planning and Land Use. Upon approval of the plan, the applicant shall enter into a secured agreement for the Program's implementation. **Timing:** Prior to the approval of a grading or clearing plan or issuance of the grading or clearing permit, the Data Recovery Program shall be approved. **Monitoring:** The Department of Planning and Land Use shall review the Data Recovery Plan for conformance with this mitigation measure. Upon approval of the Program, a Director's decision of approval shall be issued to the applicant.

M-CR-4a Mitigation Measure M-CR-1a shall apply.

M-CR-4b **SITE-SPECIFIC DATA RECOVERY PROGRAM [DPLU] [Grading Permit, Clearing Permit]**

Intent: In order to mitigate impacts to Site SDI-17,963, which is evaluated as a significant archaeological resource site pursuant to Section 15064.5 of the State CEQA Guidelines, data recovery shall occur. **Description of Requirements:** A Data Recovery Program shall be prepared which mitigates impacts to Site SDI-17,963. The Data Recovery Program shall be consistent with all requirements as documented in the site-specific cultural resources investigation (EIR Technical Appendix D) and as summarized below:

The sampling program for the site will focus on a uniform indexing of the significant areas of the site. This first level of index sampling will consist of a 3% sample of the 2,952 square meter deposit. This represents a sample of 88 square meters for the Phase 1 index. The proposed Phase 2 excavations are projected based on an area of increased research potential estimated to be approximately 2% of the 2,952 square meters; the exact number of Phase 2 excavations will depend on the results of the Phase 1 excavations. The proposed data recovery excavations are summarized as follows:

- *Size of Subsurface Deposit — 2,952 square meters*
- *Phase 1 — 3% sample of 88 test units*
- *Phase 2 — 2% sample of the overall area of increased research potential, resulting in the excavation of 60 test units. The total number of units excavated as Phase 2 will vary depending on the stratification of the subsurface deposit into areas of greater research potential.*
- *Total proposed sample size for data recovery — 148 square meters, representing approximately 5.0% of the areas of greatest research potential.*

- *A third phase of mitigation sampling is not likely at SDI-17,963, as this site is not considered a candidate for intense artifact deposits or substantial subsurface features.*

Documentation: The applicant shall prepare the Data Recovery Program pursuant to this mitigation measure and shall submit it to the Department of Planning and Land Use. Upon approval of the plan, the applicant shall enter into a secured agreement for the Program's implementation. **Timing:** Prior to the approval of a grading or clearing plan or issuance of the grading or clearing permit, the Data Recovery Program shall be approved. **Monitoring:** The Department of Planning and Land Use shall review the Data Recovery Plan for conformance with this mitigation measure. Upon approval of the Program, a Director's decision of approval shall be issued to the applicant.

M-CR-5 GRADING MONITORING [DPLU] [Grading Inspection]

Intent: In order to mitigate for the potential to impact previously undiscovered human remains during Project grading and excavation activities, grading monitoring and agency coordination shall occur. **Description of Requirement:** As outlined in CEQA Guidelines Section 15064.5, in the event that human remains are discovered during grading or construction of the project, standard procedures for such discoveries shall be implemented, including notification of the San Diego County Coroner's Office, the County of San Diego, and the Native American Heritage Commission in Sacramento, and local Kumeyaay Native American representatives. Fieldwork will be discontinued in the area of any such discovery. The Native American representative and the County of San Diego shall be consulted to determine a preferred course of action, and the burial shall be treated accordingly. **Documentation:** In the event that undiscovered human remains are uncovered during grading activities, the Project archaeologist shall provide documentation to the County demonstrating that consultation with the San Diego County Coroner's Office, the County of San Diego, and the Native American Heritage Commission in Sacramento, and local Kumeyaay Native American representatives has occurred, and documentation of the course of action and burial of the human remains shall be provided to the County.

M-CR-6 Mitigation Measures M-CR-1a, M-CR-1b, M-CR-2a, M-CR-2b, M-CR-3a, M-CR-3b, M-CR-4a, M-CR-4b, and M-CR-5 shall apply.

7.1.4 Mitigation for Impacts to Noise

A. Mitigation Measures from the EOMSP Final EIR

- 8A. *Noise sensitive land uses, including existing and proposed residences and all California gnatcatcher habitat, located within the estimated 60 CNEL noise contour shall have site specific noise studies prepared prior to approval of discretionary permits. Siting of industrial and commercial uses shall be such that adequate setbacks are created to minimize off-site noise impacts to sensitive receptors.*
- 8B. *Residential development shall be avoided in the areas where the projected CNEL noise contour for Brown Field exceeds 60 dB.*
- 8C. *All construction operations shall comply with the San Diego County Construction Noise Ordinance (Section 36.410). All construction operations scheduled to occur*

within 1,500 feet of California gnatcatcher habitat shall prepare a project specific noise mitigation and monitoring program to demonstrate compliance with established noise standards.

- 8D. *Project specific noise analyses shall be required in the hillside residential district prior to approval of projects in this area to assure noise compatibility with adjacent projects, specifically the offroad vehicle park and the San Diego International Raceway.*

B. Project-Specific Mitigation for Noise Impacts

M-N-1 NOISE PROTECTION EASEMENT: [DPW] [Final Map]

Intent: In order to preclude potential noise impacts to on- and off-site biological open space areas during long-term operation of the Project, a noise protection easement shall be placed on a portion of the Project site. **Description of Requirement:** A noise protection easement shall be granted to the County of San Diego over the entire area of Lots 43, 45 through 55, and 57 through 59 on Tentative Map 5505. This easement is for the mitigation of anticipated future noise levels that would occur on these lots during long-term operation. The easement shall require the following:

Prior to the approval of any Site Plan for any development proposal within the Noise Protection Easement, the applicant shall:

- 1. Complete to the satisfaction of the Director of the Department of Planning and Land Use, an acoustical analysis performed by a County-approved acoustical engineer, demonstrating that Project noise would not substantially contribute to future exterior noise levels at the on- and/or off-site biological open space areas in excess of 60 dBA Leq. If ambient noise levels in the biological open space exceed 60 dBA Leq prior to the development of Lots 47-49, the analysis shall demonstrate that the Project-related contributions toward cumulative noise levels in the biological open space would be less than or equal to a 0.0 net dBA Leq increase above ambient conditions that exist at the time the study was prepared.*
- 2. Incorporate to the satisfaction of the Director of the Department of Planning and Land Use all of the recommendations or mitigation measures of the acoustical analysis into the Project design and building plans.*

Documentation: The Department of Public Works shall ensure that the Final Map includes a note which documents the requirements of the Noise Protection Easement. The limits of the noise protection easement shall also be delineated on the Final Map. **Timing:** Prior to recordation of the Final Map for Unit 3 that includes Lots 43, and 45 through 50, and prior to recordation of the Final Map for Unit 4 that includes lots 51 through 55, and 57 through 59 of Tentative Map 5505. **Monitoring:** The Department of Public Works shall review the Final Maps for Unit 3 and Unit 4 for conformance with this mitigation measure.

M-N-2 GRADING PLAN: [DPW] [Grading Permit]

Intent: To preclude potential noise impacts during construction, noise reduction strategies shall be incorporated into Project construction activities. **Description of Requirement:** The Department of Public Works shall determine the likelihood of

Project grading operations occurring simultaneously with grading operations for adjacent properties. If it is determined that non-Project related grading operations could occur within 160 feet of the proposed Project site and simultaneous with Project grading activities, then the following note shall be included on the grading permit:

“The Permit Compliance Engineer shall ensure that on-site grading operations do not occur within 225 feet of any property line that abuts properties where active grading activities are occurring. On-site grading activities adjacent to the property line may occur if grading activities for adjacent properties are occurring at a minimum distance of 225 from the shared property line. The Permit Compliance Engineer (as defined in Section 87.420 of the County Grading Ordinance) shall demonstrate compliance with this requirement in the regular reports required pursuant to Section 87.420(a) of the County’s Grading Ordinance. The regular reports shall identify any days where grading activities were restricted on-site or on adjacent properties in order to ensure a minimum distance of 225 feet between grading activities.”

Documentation: The applicant shall prepare the Grading Plan pursuant to this mitigation measure. The Grading Plan shall be submitted to the Department of Public Works, along with payment of all applicable review fees and deposits. **Timing:** Prior to the issuance of grading permits for Lots 1-59 of TM 5505. **Monitoring:** The Department of Public Works shall review the Grading Plan for conformance with this mitigation measure. Upon approval of each Grading Plan, a decision of approval and a grading permit shall be issued to the applicant.

7.1.5 Mitigation for Impacts to Paleontological Resources

A. Project-Specific Mitigation for Paleontological Resources Impacts

M-PR-1 MITIGATION AND MONITORING PROGRAM: [DPLU] [Grading Inspection]

Intent: In order to mitigate potential impacts to previously unknown paleontological resources during Project grading and excavation activities, a mitigation and monitoring program shall be established. **Description of Requirement:** The impacts will be mitigated by implementing the mitigation and monitoring program detailed in the County’s Guidelines for Determining Significance – Paleontological Resources (County of San Diego 2008). Initial cutting, grading, or excavation of undisturbed substratum in areas of high and moderate sensitivity will be monitored by a Project Paleontologist or a Paleontological Resources Monitor under the supervision of the Project Paleontologist. If paleontological resources are unearthed, the Qualified Paleontologist or Paleontological Monitor shall direct, divert, or halt any grading or excavation activity until such time that the sensitivity of the resource can be determined and the appropriate recovery implemented. If found, significant paleontological resources will be salvaged, cleaned, curated, and transferred to an accredited museum or university in California. Mitigation shall be considered complete when the County’s Permit Compliance Coordinator, on behalf of the Director of Planning and Land Use, receives a final report prepared by the Project Paleontologist, and a letter from the accredited institution stating that the paleontological resources have been received and accepted. **Documentation:** The applicant shall prepare a final report documenting the findings and analysis of field work. The final report shall be submitted to the Department of Planning and Land Use. **Timing:** Fieldwork and analysis shall be completed prior to final grading inspection.

Monitoring: The Department of Planning and Land Use shall review the final paleontological report in conformance with this mitigation measure and the San Diego County Paleontological Guidelines for Determining Significance.

7.1.6 Mitigation for Impacts to Public Services

A. Applicable Mitigation from EOMSP EIR

11D. The County shall continue its efforts to site landfill facilities in South Bay.

B. Project-Specific Mitigation for Public Services Impacts

M-PS-1 Law Enforcement Services: [DPLU, REG] [Sheriff] [BP, GP, IP, UO] [DPLU Fee]

Intent: In order to provide adequate law enforcement services in compliance with the County General Plan and the Public Facilities Element (Section 2.4.7) of the East Otay Mesa Specific Plan, a Sheriff's Substation facility shall be established. **Description of Requirement:** Establishment of a Sheriff's Substation facility shall include the following:

- a. Permanent Sheriff Substation. Either alone or in conjunction with other developers similarly conditioned,
 - 1) Acquire and dedicate to the County of San Diego, or obtain an irrevocable commitment for conveyance to the County, at no cost to the County, a parcel of land suitable in size, location and configuration for a Sheriff's Substation to satisfaction of the County of San Diego Sheriff's Department.
 - 2) At such time as the Sheriff's Department determines that the Permanent Sheriff Substation is needed, obtain all required discretionary and ministerial permits for and construct or provide a permanent building of approximately 6,000 square feet and associated improvements determined to be necessary and adequate by the County of San Diego Sheriff's Department for a "turn key" Sheriff's Substation facility. The associated improvements include, but are not limited to, building and building fixtures, tenant improvements suitable for a Sheriff substation, signage, office furniture, security systems, parking, landscaping, lighting, fencing, and all utility and service connections. The associated improvements shall not include office equipment such as computers, printers, telephones, or radio equipment. Program requirements for the substation facility shall be provided by the County. Developer shall obtain County's approval of the design and specifications prior to construction of the substation facility.
- b. Interim Sheriff Substation. Either alone or in conjunction with other developers similarly conditioned, until such time as a permanent facility, satisfactory to the Sheriff's Department, is ready for occupancy, provide a temporary site and facility (e.g., an office trailer or equivalent with appropriate fixtures and office furniture) suitable to accommodate Sheriff Department personnel, vehicles and equipment. The capital costs of this temporary facility shall be provided at no cost to the County of San Diego.

- c. Financing Mechanism. Create and participate in a financing mechanism (e.g., a facilities district) determined to be sufficient by the County of San Diego to fund the construction of both the interim Sheriff's Substation and the permanent Sheriff's Substation, including, but not limited to, the land acquisition costs associated with the permanent Substation, development costs associated with both Substations, any land rental costs associated with the interim Substation, and costs of formation of the facilities district.

Documentation: The applicant shall provide documentation to the Department of Planning and Land Use that either alone or in conjunction with other developers similarly conditioned, the applicant has caused: 1) a financing mechanism to be in place and has further committed to pay the applicant's project's fair share of the financing to fund and construct a turn-key, permanent Sheriff's Substation facility, and an interim, temporary Sheriff's Substation facility; 2) a parcel of land to be acquired and dedicated to the County of San Diego as the permanent site for the required Sheriff's Substation or a parcel of land to be under contract for conveyance to the County of San Diego at no cost to the County subject only to the payment of an agreed upon purchase price by the financing mechanism established by (c) above; and 3) a permanent or temporary turn-key Sheriff's Substation facility to be available for use. **Timing:** Prior to occupancy or use and reliance of the premises pursuant to this Use Permit or Site Plan [or, in the case of a tentative map, prior to recordation of the Final Map], the Sheriff's Substation shall be available for use in accordance with the above requirements. **Monitoring:** The DPLU and Sheriff's Department shall review the submitted documentation. If, upon review, the DPLU and the Sheriff's Department determine the documentation demonstrates conformance with this condition, the DPLU and Sheriff's Department shall approve the documentation and deem the condition satisfied.

7.1.7 Mitigation for Impacts to Transportation/Traffic

A. Applicable Mitigation from EOMSP EIR

- 7A. *The County of San Diego shall work with the Cities of San Diego and Chula Vista to resolve inconsistencies in future roadway designations and shall coordinate roadway design at jurisdictional boundaries.*
- 7B. *Prior to the formation of an assessment district to fund the implementation of the regional Circulation Element, projects within the East Otay Mesa Specific Plan are required to provide a traffic impact report to analyze and mitigate their off-site traffic impacts.*

B. Project-Specific Mitigation for Transportation/Traffic Impacts

M-TR-1 SR-905 IMPROVEMENTS [DPW] [Final Map]

Intent: To mitigate impacts to the segment of Interim SR-905 (Otay Mesa Road) from La Media Road to Piper Ranch Road that would occur during all Project Phases. **Description of Requirement:** The Project applicant or Master Developer shall provide evidence to the County of San Diego that the SR-905 Phases 1A and 1B are open to traffic. **Documentation:** The applicant shall provide the Department of Public Works with evidence that Phases 1A and 1B of the SR-905 are open to traffic. **Timing:** The applicant shall provide the Department of Public Works with evidence that Phase 1A and

1B of the SR-905 are open to traffic prior to the recordation of the first final map. **Monitoring:** The Department of Public Works shall review the evidence provided by the applicant for compliance with this mitigation measure. Following review, the Department of Public Works shall provide the applicant with a letter of clearance. **Traffic Study References:** Section VIII.

M-TR-2a **OTAY MESA ROAD IMPROVEMENTS [DPW] [Final Map]**

Intent: To mitigate impacts to the segment of Otay Mesa Road between Sanyo Avenue and Enrico Fermi Drive that would occur during Project Phase 1. **Description of Requirement:** The Project applicant or Master Developer shall improve the roadway segment of Otay Mesa Road between Sanyo Avenue and Enrico Fermi Drive to provide a two-lane facility with one lane in each direction and a center two-way left turn lane. **Documentation:** The applicant shall prepare improvement plans for roadway improvements and shall submit the plans to the Department of Public Works for review and approval. Upon approval of the plans and completion of improvements, the applicant shall provide the Department of Public Works evidence of completed improvements. **Timing:** Improvements shall be completed prior to recordation of the Final Map for Unit 1. **Monitoring:** The Department of Public Works shall review the improvement plans for conformance with this mitigation measure. Upon approval of the improvement plans, a decision of approval shall be issued to the applicant. Following final inspection, the Department of Public Works shall provide the applicant with a letter of acceptance for the completed improvements. **Traffic Study References:** Section VIII and Figure 49.

M-TR-2b **OTAY MESA ROAD IMPROVEMENTS [DPW] [Final Map]**

Intent: To mitigate impacts to the segment of Otay Mesa Road between Sanyo Avenue and Enrico Fermi Drive that would occur with implementation of Project Phases 1 and 2, Phases 1 through 3, and Phases 1 through 4. **Description of Requirement:** The Project applicant or Master Developer shall improve the roadway segment of Otay Mesa Road between Sanyo Avenue and Enrico Fermi Drive to provide a four-lane facility with two lanes in each direction. **Documentation:** The applicant shall prepare improvement plans for roadway improvements and shall submit the plans to the Department of Public Works for review and approval. Upon approval of the plans and completion of improvements, the applicant shall provide the Department of Public Works evidence of completed improvements. **Timing:** Improvements shall be completed prior to recordation of the Final Map for Unit 2. **Monitoring:** The Department of Public Works shall review the improvement plans for conformance with this mitigation measure. Upon approval of the improvement plans, a decision of approval shall be issued to the applicant. Following final inspection, the Department of Public Works shall provide the applicant with a letter of acceptance for the completed improvements. **Traffic Study References:** Section VIII and Figure 50.

M-TR-3 Mitigation Measure M-TR-1 shall apply.

M-TR-4 Mitigation Measure M-TR-1 shall apply.

M-TR-5 Mitigation Measure M-TR-1 shall apply.

M-TR-6 AIRWAY ROAD IMPROVEMENTS [DPW] [Final Map]

Intent: To mitigate direct impacts to Airway Road from Airway Place to Alta Road that would occur during implementation of Phases 1 through 3 and Phases 1 through 4 of the proposed Project. **Description of Requirement:** The Project applicant or Master Developer shall improve the segment of Airway Road between Airway Place and Alta Road to provide a four-lane facility with two lanes in each direction. **Documentation:** The applicant shall prepare improvement plans for roadway improvements and shall submit the plans to the Department of Public Works for review and approval. Upon approval of the plans and completion of improvements, the applicant shall provide the Department of Public Works evidence of completed improvements. **Timing:** Improvements shall be completed prior to the recordation of the Final Map for Unit 3. **Monitoring:** The Department of Public Works shall review the improvement plans for conformance with this mitigation measure. Upon approval of the improvement plans, a decision of approval shall be issued to the applicant. Following final inspection, the Department of Public Works shall provide the applicant with a letter of acceptance for the completed improvements. **Traffic Study References:** Table 37 and Figure 51.

M-TR-7a SIEMPRE VIVA ROAD IMPROVEMENTS [DPW] [Final Map]

Intent: To provide for adequate site access during Phases 1 through 3 of Project development. **Description of Requirement:** The Project applicant or Master Developer shall improve the segment of Siempre Viva Road between Enrico Fermi Drive and Airway Place to provide a four-lane facility with two lanes in each direction. In addition, the Project applicant or Master Developer shall improve the segment of Siempre Viva Road between Airway Place and Alta Road to provide a two-lane facility with one lane in each direction and a center two-way left-turn lane. **Documentation:** The applicant shall prepare improvement plans for roadway improvements and shall submit the plans to the Department of Public Works for review and approval. Upon approval of the plans and completion of improvements, the applicant shall provide the Department of Public Works evidence of completed improvements. **Timing:** Improvements shall be completed prior to the recordation of the Final Map for Unit 3. **Monitoring:** The Department of Public Works shall review the improvement plans for conformance with this mitigation measure. Upon approval of the improvement plans, a decision of approval shall be issued to the applicant. Following final inspection, the Department of Public Works shall provide the applicant with a letter of acceptance for the completed improvements. **Traffic Study References:** Table 37 and Figure 51.

M-TR-7b SIEMPRE VIVA ROAD IMPROVEMENTS [DPW] [Final Map]

Intent: To mitigate direct impacts to Siempre Viva Road from Airway Place to Alta Road that would occur during implementation of Phases 1 through 4 of the proposed Project. **Description of Requirement:** The Project applicant or Master Developer shall improve the segment of Siempre Viva Road between Airway Place and Alta Road to provide a four-lane facility with two lanes in each direction. **Documentation:** The applicant shall prepare improvement plans for roadway improvements and shall submit the plans to the Department of Public Works for review and approval. Upon approval of the plans and completion of improvements, the applicant shall provide the Department of Public Works evidence of completed improvements. **Timing:** Improvements shall be completed prior to the recordation of the Final Map for Unit 4. **Monitoring:** The Department of Public Works shall review the improvement plans for conformance with this mitigation measure. Upon approval of the improvement plans, a decision of approval

shall be issued to the applicant. Following final inspection, the Department of Public Works shall provide the applicant with a letter of acceptance for the completed improvements. **Traffic Study References:** Table 37 and Figure 52.

M-TR-8 Mitigation Measure M-TR-1 shall apply.

M-TR-9 Mitigation Measure M-TR-1 shall apply.

M-TR-10 ENRICO FERMI DRIVE IMPROVEMENTS [DPW] [Final Map]

Intent: To mitigate direct impacts to Enrico Fermi Drive from Otay Mesa Road to Airway Road that would occur during implementation of Phases 1 through 3 and Phases 1 through 4 of the proposed Project, and cumulative impacts that would occur during the Cumulative (2020) With SR-905 condition. **Description of Requirement:** The Project applicant or Master Developer shall improve the segment of Enrico Fermi Drive between Otay Mesa Road and Airway Road to provide a four-lane facility with two lanes in each direction. **Documentation:** The applicant shall prepare improvement plans for roadway improvements and shall submit the plans to the Department of Public Works for review and approval. Upon approval of the plans and completion of improvements, the applicant shall provide the Department of Public Works evidence of completed improvements. **Timing:** Improvements shall be completed prior to the recordation of the Final Map for Unit 3. **Monitoring:** The Department of Public Works shall review the improvement plans for conformance with this mitigation measure. Upon approval of the improvement plans, a decision of approval shall be issued to the applicant. Following final inspection, the Department of Public Works shall provide the applicant with a letter of acceptance for the completed improvements. **Traffic Study References:** Section VIII and Figure 51.

M-TR-11 Mitigation Measure M-TR-1 shall apply.

M-TR-12 Mitigation Measure M-TR-1 shall apply.

M-TR-13a SIEMPRE VIVA ROAD/PASEO DE LAS AMERICAS INTERSECTION IMPROVEMENTS [DPW] [Final Map]

Intent: To mitigate direct impacts to the intersection of Siempre Viva Road/Paseo de las Americas that would occur with implementation of Phase 1 and Phases 1 and 2 of the Project. **Description of Requirement:** The Project applicant or Master Developer shall improve the intersection of Siempre Viva Road/Paseo De Las Americas to provide the following lane configurations, or shall implement other improvements that are acceptable to both the City and County of San Diego and that achieve an acceptable LOS at this intersection:

- One (1) eastbound left turn lane;
- Three (3) eastbound through lanes;
- One (1) eastbound right turn lane;
- One (1) westbound left turn lane;
- Two (2) westbound through lanes;
- One (1) westbound shared through-right lane;
- One (1) northbound left turn lane;
- Two (2) northbound through lanes;
- One (1) northbound right turn lane;
- One (1) southbound left turn lane;

- One (1) southbound through lane; and
- One (1) southbound shared through-right lane.

It should be noted that improvements to this intersection would require appropriate permits from the City of San Diego and are subject to City approval and therefore may not be feasible. In the event that the City of San Diego does not allow for improvements to this intersection, Project impacts would be significant and unmitigable.

Documentation: The applicant shall prepare improvement plans for roadway improvements and shall submit the plans to the City of San Diego for review and approval. Upon approval of the plans by the City of San Diego and completion of improvements, the applicant shall provide the Department of Public Works evidence of completed improvements. **Timing:** Prior to the recordation of the Final Map for Unit 1.

Monitoring: The City of San Diego shall review the improvement plans for conformance with this mitigation measure. Upon approval of the improvement plans, a decision of approval shall be issued to the applicant. Following final inspection, the City of San Diego shall provide the applicant with a letter of acceptance for the completed improvements. The letter of acceptance shall be provided to the Department of Public Works. **Traffic Study References:** Section VIII and Figure 49.

M-TR-13b SIEMPRE VIVA ROAD/PASEO DE LAS AMERICAS INTERSECTION IMPROVEMENTS [DPW] [Final Map]

Intent: To mitigate direct impacts to the intersection of Siempre Viva Road/Paseo de las Americas that would occur with implementation of Phases 1 through 3 and Phases 1 through 4 of the proposed Project. **Description of Requirement:** The Project applicant or Master Developer shall improve the intersection of Siempre Viva Road/Paseo De Las Americas to provide the following lane configurations, or shall implement other improvements that are acceptable to both the City and County of San Diego and that achieve an acceptable LOS at this intersection:

- Two (2) eastbound left turn lanes;
- Three (3) eastbound through lanes;
- One (1) eastbound right turn lane;
- One (1) westbound left turn lane;
- Two (2) westbound through lanes;
- One (1) westbound shared through-right lane;
- One (1) northbound left turn lane;
- Two (2) northbound through lanes;
- One (1) northbound right turn lane;
- One (1) southbound left turn lane;
- One (1) southbound through lane; and
- One (1) southbound shared through-right lane.

It should be noted that improvements to this intersection would require appropriate permits from the City of San Diego and are subject to City approval and therefore may not be feasible. In the event that the City of San Diego does not allow for improvements to this intersection, Project impacts would be significant and unmitigable.

Documentation: The applicant shall prepare improvement plans for roadway improvements and shall submit the plans to the City of San Diego for review and approval. Upon approval of the plans by the City of San Diego and completion of improvements, the applicant shall provide the Department of Public Works evidence of completed improvements. **Timing:** Prior to the recordation of the Final Map for Unit 3.

Monitoring: The City of San Diego shall review the improvement plans for

conformance with this mitigation measure. Upon approval of the improvement plans, a decision of approval shall be issued to the applicant. Following final inspection, the City of San Diego shall provide the applicant with a letter of acceptance for the completed improvements. The letter of acceptance shall be provided to the Department of Public Works. **Traffic Study References:** Section VIII and Figure 51.

M-TR-14 Mitigation Measure M-TR-1 shall apply.

M-TR-15 OTAY MESA ROAD/SANYO AVENUE INTERSECTION IMPROVEMENTS [DPW] [Final Map]

Intent: To mitigate direct impacts to the intersection of Otay Mesa Road/Sanyo Avenue that would occur with implementation of Phase 1 and 2, Phases 1 through 3, and Phases 1 through 4 of the proposed Project. **Description of Requirement:** The Project applicant or Master Developer shall modify the traffic signal and widen the intersection to accommodate the following lane configurations at the intersection of Otay Mesa Road/Sanyo Avenue:

- One (1) eastbound through lane;
- One (1) eastbound shared through-right lane;
- One (1) westbound left turn lane;
- Two (2) westbound through lanes;
- One (1) northbound left turn lane; and
- One (1) northbound shared left-right turn lane.

Documentation: The applicant shall prepare improvement plans for roadway improvements and shall submit the plans to the Department of Public Works for review and approval. Upon approval of the plans and completion of improvements, the applicant shall provide the Department of Public Works evidence of completed improvements.

Timing: Improvements shall be completed prior to recordation of the Final Map for Unit 2. **Monitoring:** The Department of Public Works shall review the improvement plans for conformance with this mitigation measure. Upon approval of the improvement plans, a decision of approval shall be issued to the applicant. Following final inspection, the Department of Public Works shall provide the applicant with a letter of acceptance for the completed improvements. **Traffic Study References:** Section VIII and Figure 50.

M-TR-16a OTAY MESA ROAD/ENRICO FERMI DRIVE INTERSECTION IMPROVEMENTS [DPW] [Final Map]

Intent: To mitigate direct impacts to the intersection of Otay Mesa Road/Enrico Fermi Drive that would result from implementation of Phases 1 and 2 of the proposed Project. **Description of Requirement:** The Project applicant or Master Developer shall assure the widening of the intersection of Otay Mesa Road/Enrico Fermi Drive to accommodate the following lane configurations:

- One (1) eastbound through lane;
- One (1) eastbound right turn lane;
- One (1) westbound left turn lane;
- One (1) westbound through lane;
- One (1) northbound left turn lane; and
- One (1) northbound right turn lane.

Documentation: The applicant shall prepare improvement plans for roadway improvements and shall submit the plans to the Department of Public Works for review and approval. Upon approval of the plans and completion of improvements, the applicant

shall provide the Department of Public Works evidence of completed improvements.

Timing: Improvements shall be completed prior to recordation of the Final Map for Unit 2.

Monitoring: The Department of Public Works shall review the improvement plans for conformance with this mitigation measure. Upon approval of the improvement plans, a decision of approval shall be issued to the applicant. Following final inspection, the Department of Public Works shall provide the applicant with a letter of acceptance for the completed improvements. **Traffic Study References:** Section VIII and Figure 50.

M-TR-16b OTAY MESA ROAD/ENRICO FERMI DRIVE INTERSECTION IMPROVEMENTS [DPW] [Final Map]

Intent: To mitigate direct impacts to the intersection of Otay Mesa Road/Enrico Fermi Drive that would result from implementation of Phases 1 through 3, and Phases 1 through 4 of the proposed Project. **Description of Requirement:** The Project applicant or Master Developer shall assure the widening of the intersection of Otay Mesa Road/Enrico Fermi Drive to accommodate the following lane configurations:

- One (1) eastbound through lane;
- One (1) eastbound right turn lane;
- One (1) westbound left turn lane;
- One (1) westbound through lane;
- Two (2) northbound left turn lanes; and
- One (1) northbound right turn lane.

Documentation: The applicant shall prepare improvement plans for roadway improvements and shall submit the plans to the Department of Public Works for review and approval. Upon approval of the plans and completion of improvements, the applicant shall provide the Department of Public Works evidence of completed improvements.

Timing: Improvements shall be completed prior to recordation of the Final Map for Unit 3.

Monitoring: The Department of Public Works shall review the improvement plans for conformance with this mitigation measure. Upon approval of the improvement plans, a decision of approval shall be issued to the applicant. Following final inspection, the Department of Public Works shall provide the applicant with a letter of acceptance for the completed improvements. **Traffic Study References:** Section VIII and Figure 51.

M-TR-17a SIEMPRE VIVA/MICHAEL FARADAY INTERSECTION IMPROVEMENTS [DPW] [Final Map]

Intent: To mitigate direct impacts to the intersection of Siempre Viva /Michael Faraday that would occur with implementation of Phases 1 and 2, Phases 1 through 3, and Phases 1 through 4 of the proposed Project. **Description of Requirement:** The Project applicant or Master Developer shall assure that the intersection of Siempre Viva Road/Michael Faraday is modified or restriped as necessary to accommodate the following lane configurations as recommended by the Traffic Impact Study for this Project and in consultation with the City of San Diego:

- One (1) eastbound left turn lane;
- One (1) eastbound through lane;
- One (1) eastbound shared through-right lane;
- One (1) westbound left turn lane;
- One (1) westbound through lanes;
- One (1) westbound shared through-right lane;
- One (1) northbound right turn lane; and
- One (1) southbound right turn lane.

In addition, the Project applicant or Master Developer shall work with the City of San Diego to restrict the intersection to prevent left turn movements out of Michael Faraday Drive. It should be noted that improvements and turn-movement restrictions at the intersection of Siempre Viva Road/Michael Faraday would require appropriate permits from the City of San Diego and is subject to City approval and therefore may not be feasible. In the event that the City of San Diego does not allow for improvements to this intersection, Project impacts would be significant and unmitigable. **Documentation:** The Project applicant or Master Developer shall submit documentation from the City of San Diego demonstrating the requirements of this condition have been completed. **Timing:** Prior to the recordation of the Final Map for Unit 2. **Monitoring:** The Director of Planning and Land Use shall review the evidence provided by the applicant for compliance with this mitigation measure. Following review, the Director of Planning and Land Use shall provide the applicant with a letter of clearance. **Traffic Study References:** Section VIII and Figure 50.

M-TR-17b **SIEMPRE VIVA/MICHAEL FARADAY INTERSECTION IMPROVEMENTS [DPW] [Final Map]**

Intent: To mitigate significant direct impacts to the intersection of Siempre Viva /Michael Faraday that would occur under in the Cumulative (2020) With SR-905 Phases 1A and 1B condition. **Description of Requirement:** The Project applicant or Master Developer shall improve or agree to improve and provide security for the intersection of Siempre Viva Road/Michael Faraday as recommended by the Traffic Impact Study (refer to Traffic Impact Study Figure 51) and in consultation with the City of San Diego. Improvements required for this intersection under cumulative conditions include the following lane configurations:

- One (1) eastbound left turn lane;
- One (1) eastbound through lane;
- One (1) eastbound shared through-right lane;
- One (1) westbound left turn lane;
- One (1) westbound through lane;
- One (1) westbound shared through-right lane;
- One (1) northbound shared left-through-right turn lane;
- One (1) southbound shared left-through lane; and
- One (1) southbound right turn lane.

It should be noted that improvements and turn-movement restrictions at the intersection of Siempre Viva Road/Michael Faraday would require appropriate permits from the City of San Diego and is subject to City approval and therefore may not be feasible. In the event that the City of San Diego does not allow for improvements to this intersection, Project impacts would be significant and unmitigable. **Documentation:** The Project applicant or Master Developer shall submit documentation from the City of San Diego demonstrating the requirements of this condition have been completed. **Timing:** The improvements shall be fully constructed to the satisfaction of the City of San Diego prior to the recordation of the Final Map for Unit 4. **Monitoring:** The Director of Planning and Land Use shall review the evidence provided by the applicant for compliance with this mitigation measure. Following review, the Director of Planning and Land Use shall provide the applicant with a letter of clearance. **Traffic Study References:** Section VIII and Figure 53.

M-TR-18 Mitigation Measure M-TR-1 shall apply.

M-TR-19 Mitigation Measure M-TR-1 shall apply.

M-TR-20 Mitigation Measure M-TR-1 shall apply.

M-TR-21a **AIRWAY ROAD/ENRICO FERMI INTERSECTION IMPROVEMENTS [DPW]**
[Final Map]

Intent: To mitigate direct impacts that would result from implementation of Phases 1 through 3 of the proposed Project. **Description of Requirement:** The Project applicant or Master Developer shall improve the intersection of Airway Road/Enrico Fermi Drive and modify the existing traffic signal to accommodate the following lane configurations:

- One (1) eastbound left turn lane;
- One (1) eastbound shared through-right lane;
- One (1) eastbound right turn lane;
- One (1) westbound left turn lane;
- One (1) westbound through lane;
- One (1) westbound right turn lane;
- One (1) northbound left turn lane;
- One (1) northbound through lane;
- One (1) northbound shared through-right lane;
- Two (2) southbound left turn lanes;
- One (1) southbound through lane; and
- One (1) southbound shared through-right lane.

Documentation: The applicant shall prepare improvement plans for roadway improvements and shall submit the plans to the Department of Public Works for review and approval. Upon approval of the plans and completion of improvements, the applicant shall provide the Department of Public Works evidence of completed improvements.

Timing: Improvements shall be completed prior to recordation of the Final Map for Unit 3. **Monitoring:** The Department of Public Works shall review the improvement plans for conformance with this mitigation measure. Upon approval of the improvement plans, a decision of approval shall be issued to the applicant. Following final inspection, the Department of Public Works shall provide the applicant with a letter of acceptance for the completed improvements. **Traffic Study References:** Section VIII and Figure 51.

M-TR-21b **AIRWAY ROAD/ENRICO FERMI INTERSECTION IMPROVEMENTS [DPW]**
[Final Map]

Intent: To mitigate direct impacts that would result from implementation of Phases 1 through 4 of the proposed Project. **Description of Requirement:** The Project applicant or Master Developer shall improve the intersection of Airway Road/Enrico Fermi Drive and modify the existing traffic signal to accommodate the following lane configurations:

- One (1) eastbound left turn lane;
- One (1) eastbound shared through-right lane;
- One (1) eastbound right turn lane;
- One (1) westbound left turn lane;
- One (1) westbound shared through-right lane;
- One (1) westbound right turn lane;
- One (1) northbound left turn lane;
- One (1) northbound through lane;

- One (1) northbound shared through-right lane;
- Two (2) southbound left turn lanes;
- One (1) southbound through lane; and
- One (1) southbound shared through-right lane.

Documentation: The applicant shall prepare improvement plans for roadway improvements and shall submit the plans to the Department of Public Works for review and approval. Upon approval of the plans and completion of improvements, the applicant shall provide the Department of Public Works evidence of completed improvements.

Timing: Improvements shall be completed prior to recordation of the Final Map for Unit

4. **Monitoring:** The Department of Public Works shall review the improvement plans for conformance with this mitigation measure. Upon approval of the improvement plans, a decision of approval shall be issued to the applicant. Following final inspection, the Department of Public Works shall provide the applicant with a letter of acceptance for the completed improvements. **Traffic Study References:** Section VIII and Figure 52.

M-TR-22a **SIEMPRE VIVA ROAD/ENRICO FERMI DRIVE INTERSECTION IMPROVEMENTS [DPW] [Final Map]**

Intent: To mitigate direct impacts that would result from implementation of Phases 1 through 3 of the proposed Project. **Description of Requirement:** The Project applicant or Master Developer shall improve the intersection of Siempre Viva Road/Enrico Fermi Drive and modify the existing traffic signal to accommodate the following lane configurations:

- Two (2) eastbound left turn lanes;
- One (1) eastbound through lane;
- One (1) eastbound shared through-right lane;
- One (1) westbound left turn lane;
- One (1) westbound through lane;
- One (1) westbound shared through-right lane;
- One (1) northbound left turn lane;
- One (1) northbound through lane;
- One (1) northbound shared through-right lane;
- One (1) southbound left turn lane;
- One (1) southbound through lane; and
- One (1) southbound shared through-right lane.

Documentation: The applicant shall prepare improvement plans for roadway improvements and shall submit the plans to the Department of Public Works for review and approval. Upon approval of the plans and completion of improvements, the applicant shall provide the Department of Public Works evidence of completed improvements.

Timing: Improvements shall be completed prior to recordation of the Final Map for Unit

3. **Monitoring:** The Department of Public Works shall review the improvement plans for conformance with this mitigation measure. Upon approval of the improvement plans, a decision of approval shall be issued to the applicant. Following final inspection, the Department of Public Works shall provide the applicant with a letter of acceptance for the completed improvements. **Traffic Study References:** Section VIII and Figure 51.

M-TR-22b **SIEMPRE VIVA ROAD/ENRICO FERMI DRIVE INTERSECTION IMPROVEMENTS [DPW] [Final Map]**

Intent: To mitigate direct impacts that would result from implementation of Phases 1 through 4 of the proposed Project. **Description of Requirement:** The Project applicant

or Master Developer shall improve the intersection of Siempre Viva Road/Enrico Fermi Drive and modify the existing traffic signal to accommodate the following lane configurations:

- Two (2) eastbound left turn lanes;
- One (1) eastbound through lane;
- One (1) eastbound shared through-right lane;
- One (1) westbound left turn lane;
- Two (2) westbound through lanes;
- One (1) westbound right turn lane;
- One (1) northbound left turn lane;
- One (1) northbound through lane;
- One (1) northbound shared through-right lane;
- One (1) southbound left turn lane;
- One (1) southbound through lane; and
- One (1) southbound shared through-right lane.

Documentation: The applicant shall prepare improvement plans for roadway improvements and shall submit the plans to the Department of Public Works for review and approval. Upon approval of the plans and completion of improvements, the applicant shall provide the Department of Public Works evidence of completed improvements.

Timing: Improvements shall be completed prior to recordation of the Final Map for Unit 4. **Monitoring:** The Department of Public Works shall review the improvement plans for conformance with this mitigation measure. Upon approval of the improvement plans, a decision of approval shall be issued to the applicant. Following final inspection, the Department of Public Works shall provide the applicant with a letter of acceptance for the completed improvements. **Traffic Study References:** Section VIII and Figure 52.

M-TR-23 Mitigation Measure M-TR-1 shall apply.

M-TR-24 Mitigation Measure M-TR-1 shall apply.

M-TR-25 Mitigation Measure M-TR-1 shall apply.

M-TR-26 Mitigation Measure M-TR-1 shall apply.

M-TR-27a **AIRWAY ROAD/ALTA ROAD INTERSECTION IMPROVEMENTS [DPW]**
[Final Map]

Intent: To mitigate direct impacts to the on-site intersection of Airway Road/Alta Road that would occur with implementation of Phase 1 of the Project. **Description of Requirement:** The Project applicant or Master Developer shall assure the construction of a stop sign on the northbound approach, and shall improve the intersection to accommodate the following lane configurations:

- One (1) eastbound shared through-right lane;
- One (1) westbound shared left-through lane; and
- One (1) northbound shared left-right lane.

Documentation: The applicant shall prepare improvement plans for roadway improvements and shall submit the plans to the Department of Public Works for review and approval. Upon approval of the plans and completion of improvements, the applicant shall provide the Department of Public Works evidence of completed improvements.

Timing: Improvements shall be completed prior to recordation of the Final Map for Unit

1. **Monitoring:** The Department of Public Works shall review the improvement plans for conformance with this mitigation measure. Upon approval of the improvement plans, a decision of approval shall be issued to the applicant. Following final inspection, the Department of Public Works shall provide the applicant with a letter of acceptance for the completed improvements. **Traffic Study References:** Table 38 and Figure 44.

M-TR-27b **AIRWAY ROAD/ALTA ROAD INTERSECTION IMPROVEMENTS [DPW]**
[Final Map]

Intent: To mitigate direct impacts to the on-site intersection of Airway Road/Alta Road that would occur with Phases 1 and 2 of the Project. **Description of Requirement:** The Project applicant or Master Developer shall improve the intersection to accommodate the following lane configurations:

- One (1) eastbound through lane;
- One (1) eastbound shared through-right lane;
- One (1) westbound shared left-through lane;
- One (1) westbound through lane; and
- One (1) northbound shared left-right lane.

Documentation: The applicant shall prepare improvement plans for roadway improvements and shall submit the plans to the Department of Public Works for review and approval. Upon approval of the plans and completion of improvements, the applicant shall provide the Department of Public Works evidence of completed improvements.

Timing: Improvements shall be completed prior to recordation of the Final Map for Unit 2.

2. **Monitoring:** The Department of Public Works shall review the improvement plans for conformance with this mitigation measure. Upon approval of the improvement plans, a decision of approval shall be issued to the applicant. Following final inspection, the Department of Public Works shall provide the applicant with a letter of acceptance for the completed improvements. **Traffic Study References:** Table 38 and Figure 45.

M-TR-27c **AIRWAY ROAD/ALTA ROAD INTERSECTION IMPROVEMENTS [DPW]**
[Final Map]

Intent: To mitigate direct impacts to the on-site intersection of Airway Road/Alta Road that would occur with Phases 1 through 3 of the Project. **Description of Requirement:** The Project applicant or Master Developer shall improve the intersection to include an acceleration lane for vehicles making a northbound left turn from Alta Road onto westbound Airway Road, and to accommodate the following lane configurations:

- One (1) eastbound through lane;
- One (1) eastbound shared through-right lane;
- One (1) westbound shared left-through lane;
- One (1) westbound through lane; and
- One (1) northbound shared left-right lane.

Documentation: The applicant shall prepare improvement plans for roadway improvements and shall submit the plans to the Department of Public Works for review and approval. Upon approval of the plans and completion of improvements, the applicant shall provide the Department of Public Works evidence of completed improvements.

Timing: Improvements shall be completed prior to recordation of the Final Map for Unit 3.

3. **Monitoring:** The Department of Public Works shall review the improvement plans for conformance with this mitigation measure. Upon approval of the improvement plans, a decision of approval shall be issued to the applicant. Following final inspection, the

Department of Public Works shall provide the applicant with a letter of acceptance for the completed improvements. **Traffic Study References:** Table 38 and Figure 46.

M-TR-27d AIRWAY ROAD/ALTA ROAD INTERSECTION IMPROVEMENTS [DPW] [Final Map]

Intent: To mitigate direct impacts to the on-site intersection of Airway Road/Alta Road that would occur with Phases 1 through 4 of the Project. **Description of Requirement:** The Project applicant or Master Developer shall assure the construction of a traffic signal. In addition, the Project applicant or Master Developer shall improve the intersection to accommodate the following lane configurations:

- One (1) eastbound through lane;
- One (1) eastbound shared through-right lane;
- One (1) westbound left turn lane;
- Two (2) westbound through lanes;
- One (1) northbound left turn lane; and
- One (1) northbound shared left-right lane.

Documentation: The applicant shall prepare improvement plans for roadway improvements and shall submit the plans to the Department of Public Works for review and approval. Upon approval of the plans and completion of improvements, the applicant shall provide the Department of Public Works evidence of completed improvements.

Timing: Improvements shall be completed prior to recordation of the Final Map for Unit 4. **Monitoring:** The Department of Public Works shall review the improvement plans for conformance with this mitigation measure. Upon approval of the improvement plans, a decision of approval shall be issued to the applicant. Following final inspection, the Department of Public Works shall provide the applicant with a letter of acceptance for the completed improvements. **Traffic Study References:** Table 38 and Figure 47.

M-TR-28a AIRWAY ROAD/SIEMPRE VIVA ROAD INTERSECTION IMPROVEMENTS [DPW] [Final Map]

Intent: To mitigate direct impacts to the on-site intersection of Airway Road/Siempre Viva Road that would occur with Phase 2 of the proposed Project. **Description of Requirement:** The Project applicant or Master Developer shall assure the construction of a stop sign at the eastbound approach to the intersection of Airway Road/Siempre Viva Road. In addition, the Project applicant or Master Developer shall improve the intersection to accommodate the following lane configurations:

- One (1) eastbound shared left-right lane;
- One (1) northbound shared left-through lane; and
- One (1) southbound shared through-right lane.

Documentation: The applicant shall prepare improvement plans for roadway improvements and shall submit the plans to the Department of Public Works for review and approval. Upon approval of the plans and completion of improvements, the applicant shall provide the Department of Public Works evidence of completed improvements.

Timing: Improvements shall be completed prior to recordation of the Final Map for Unit 2. **Monitoring:** The Department of Public Works shall review the improvement plans for conformance with this mitigation measure. Upon approval of the improvement plans, a decision of approval shall be issued to the applicant. Following final inspection, the Department of Public Works shall provide the applicant with a letter of acceptance for the completed improvements. **Traffic Study References:** Table 38 and Figure 45.

M-TR-28b AIRWAY ROAD/SIEMPRE VIVA ROAD INTERSECTION IMPROVEMENTS [DPW] [Final Map]

Intent: To mitigate direct impacts to the on-site intersection of Airway Road/Siempre Viva Road that would occur with Phase 3 of the proposed Project. **Description of Requirement:** The Project applicant or Master Developer shall improve the intersection of Airway Road/Siempre Viva Road to accommodate the following lane configurations:

- One (1) eastbound shared left-right lane;
- One (1) northbound shared left-through lane;
- One (1) northbound through lane; and
- One (1) southbound shared through-right lane.

Documentation: The applicant shall prepare improvement plans for roadway improvements and shall submit the plans to the Department of Public Works for review and approval. Upon approval of the plans and completion of improvements, the applicant shall provide the Department of Public Works evidence of completed improvements.

Timing: Improvements shall be completed prior to recordation of the Final Map for Unit 3. **Monitoring:** The Department of Public Works shall review the improvement plans for conformance with this mitigation measure. Upon approval of the improvement plans, a decision of approval shall be issued to the applicant. Following final inspection, the Department of Public Works shall provide the applicant with a letter of acceptance for the completed improvements. **Traffic Study References:** Table 38 and Figure 46.

M-TR-28c AIRWAY ROAD/SIEMPRE VIVA ROAD INTERSECTION IMPROVEMENTS [DPW] [Final Map]

Intent: To mitigate direct impacts to the on-site intersection of Airway Road/Siempre Viva Road that would occur with buildout of the proposed Project. **Description of Requirement:** The Project applicant or Master Developer shall assure the construction of a traffic signal at the intersection of Airway Road/Siempre Viva Road. In addition, the Project applicant or Master Developer shall improve the intersection of Airway Road/Siempre Viva Road to accommodate the following lane configurations:

- One (1) eastbound shared left-right lane;
- One (1) northbound left turn lane;
- Two (2) northbound through lanes;
- One (1) southbound through lane; and
- One (1) southbound shared through-right lane.

Documentation: The applicant shall prepare improvement plans for roadway improvements and shall submit the plans to the Department of Public Works for review and approval. Upon approval of the plans and completion of improvements, the applicant shall provide the Department of Public Works evidence of completed improvements.

Timing: Improvements shall be completed prior to recordation of the Final Map for Unit 4. **Monitoring:** The Department of Public Works shall review the improvement plans for conformance with this mitigation measure. Upon approval of the improvement plans, a decision of approval shall be issued to the applicant. Following final inspection, the Department of Public Works shall provide the applicant with a letter of acceptance for the completed improvements. **Traffic Study References:** Table 38 and Figure 47.

M-TR-29a SIEMPRE VIVA/ALTA ROAD INTERSECTION IMPROVEMENTS [DPW] [Final Map]

Intent: To mitigate direct impacts to the on-site intersection of Siempre Viva/Alta Road that would occur with Phase 1 of the proposed Project. **Description of Requirement:**

The Project applicant or Master Developer shall assure the construction of stop signs at all approaches at the intersection of Siempre Viva Road/Alta Road. In addition, the Project applicant or Master Developer shall improve the intersection to accommodate the following lane configurations:

- One (1) eastbound shared left-through -right lane;
- One (1) westbound shared left-through-right lane;
- One (1) northbound shared left-through-right lane; and
- One (1) southbound shared left-through-right lane.

Documentation: The applicant shall prepare improvement plans for roadway improvements and shall submit the plans to the Department of Public Works for review and approval. Upon approval of the plans and completion of improvements, the applicant shall provide the Department of Public Works evidence of completed improvements.

Timing: Improvements shall be completed prior to recordation of the Final Map for Unit 1.

Monitoring: The Department of Public Works shall review the improvement plans for conformance with this mitigation measure. Upon approval of the improvement plans, a decision of approval shall be issued to the applicant. Following final inspection, the Department of Public Works shall provide the applicant with a letter of acceptance for the completed improvements. **Traffic Study References:** Table 38 and Figure 44.

**M-TR-29b SIEMPRE VIVA/ALTA ROAD INTERSECTION IMPROVEMENTS [DPW]
[Final Map]**

Intent: To mitigate direct impacts to the on-site intersection of Siempre Viva/Alta Road that would occur with Phases 1 and 2 of the proposed Project. **Description of**

Requirement: The Project applicant or Master Developer shall improve the intersection to accommodate the following lane configurations:

- One (1) eastbound shared left-through lane;
- One (1) eastbound shared through-right lane;
- One (1) westbound shared left-through lane;
- One (1) westbound shared through-right lane;
- One (1) northbound shared left-through-right lane; and
- One (1) southbound shared left-through-right lane.

Documentation: The applicant shall prepare improvement plans for roadway improvements and shall submit the plans to the Department of Public Works for review and approval. Upon approval of the plans and completion of improvements, the applicant shall provide the Department of Public Works evidence of completed improvements.

Timing: Improvements shall be completed prior to recordation of the Final Map for Unit 2.

Monitoring: The Department of Public Works shall review the improvement plans for conformance with this mitigation measure. Upon approval of the improvement plans, a decision of approval shall be issued to the applicant. Following final inspection, the Department of Public Works shall provide the applicant with a letter of acceptance for the completed improvements. **Traffic Study References:** Table 38 and Figure 45.

**M-TR-29c SIEMPRE VIVA/ALTA ROAD INTERSECTION IMPROVEMENTS [DPW]
[Final Map]**

Intent: To mitigate direct impacts to the on-site intersection of Siempre Viva/Alta Road that would occur with Phases 1 through 3 of the proposed Project. **Description of**

Requirement: The Project applicant or Master Developer shall assure the construction of stop signs along the northbound and southbound approaches at the intersection of Siempre Viva Road/Alta Road (i.e., two-way stop sign control), and shall construct an

acceleration lane for vehicles making a northbound left and southbound left turn from Alta Road onto eastbound and westbound Siempre Vive Road. In addition, the Project applicant or Master Developer shall improve the intersection to accommodate the following lane configurations:

- One (1) eastbound left turn lane;
- Two (2) eastbound through lanes;
- One (1) eastbound right turn lane;
- One (1) westbound shared left-through lane;
- One (1) westbound shared through-right lane;
- Two (2) northbound left turn lanes;
- One (1) northbound shared through-right lane; and
- One (1) southbound left turn lane; and
- One (1) southbound shared through-right lane.

Documentation: The applicant shall prepare improvement plans for roadway improvements and shall submit the plans to the Department of Public Works for review and approval. Upon approval of the plans and completion of improvements, the applicant shall provide the Department of Public Works evidence of completed improvements.

Timing: Improvements shall be completed prior to recordation of the Final Map for Unit 3. **Monitoring:** The Department of Public Works shall review the improvement plans for conformance with this mitigation measure. Upon approval of the improvement plans, a decision of approval shall be issued to the applicant. Following final inspection, the Department of Public Works shall provide the applicant with a letter of acceptance for the completed improvements. **Traffic Study References:** Table 38 and Figure 46.

M-TR-29d SIEMPRE VIVA/ALTA ROAD INTERSECTION IMPROVEMENTS [DPW] [Final Map]

Intent: To mitigate direct impacts to the on-site intersection of Siempre Viva/Alta Road that would occur with Phases 1 through 4 of the proposed Project. **Description of Requirement:** The Project applicant or Master Developer shall assure the construction of a traffic signal. In addition, the Project applicant or Master Developer shall improve the intersection to accommodate the following lane configurations:

- One (1) eastbound left turn lane;
- One (1) eastbound through lane;
- One (1) eastbound shared through-right lane;
- One (1) westbound left turn lane;
- One (1) westbound through lane;
- One (1) westbound shared through-right lane;
- Two (2) northbound left turn lanes;
- One (1) northbound shared through-right lane; and
- One (1) southbound left turn lane; and
- One (1) southbound shared through-right lane.

Documentation: The applicant shall prepare improvement plans for roadway improvements and shall submit the plans to the Department of Public Works for review and approval. Upon approval of the plans and completion of improvements, the applicant shall provide the Department of Public Works evidence of completed improvements.

Timing: Improvements shall be completed prior to recordation of the Final Map for Unit 4. **Monitoring:** The Department of Public Works shall review the improvement plans for conformance with this mitigation measure. Upon approval of the improvement plans, a decision of approval shall be issued to the applicant. Following final inspection, the

Department of Public Works shall provide the applicant with a letter of acceptance for the completed improvements. **Traffic Study References:** Table 38 and Figure 47.

M-TR-30 TRAFFIC CONTROL PLAN [DPW] [Final Map]

Intent: To preclude significant traffic impacts during each phase of proposed construction activities. **Description of Requirement:** The Project applicant or Master Developer shall obtain a traffic control permit from the County Department of Public Works prior to each phase of construction. **Documentation:** The required Traffic Control Permit would serve as documentation of the applicant's adherence to this requirement. **Timing:** Prior to issuance of grading or improvement plans for each unit authorizing construction within or adjacent to existing roadways. **Monitoring:** The Department of Public Works shall ensure that the applicant has obtained a Traffic Control Permit prior to issuance of any permits to construct improvements within or adjacent to existing roadways.

M-TR-31 The Project applicant or Master Developer would be required to pay fees in accordance with the San Diego County TIF Ordinance. Payment of TIF fees would reduce Project impacts to the roadway segment of Otay Mesa Road between Enrico Fermi Drive and Alta Road to less than significant levels.

M-TR-32 The Project applicant or Master Developer would be required to pay fees in accordance with the San Diego County TIF Ordinance. Payment of TIF fees would reduce Project impacts to the intersection of Otay Mesa Road/Vann Centre Boulevard to less than significant levels.

M-TR-33 The Project applicant or Master Developer would be required to pay fees in accordance with the San Diego County TIF Ordinance. Payment of TIF fees would reduce Project impacts to the intersection of Otay Mesa Road/Alta Road to less than significant levels.

M-TR-34 AIRWAY ROAD/SANYO AVENUE INTERSECTION IMPROVEMENTS [DPW] [Final Map]

Intent: To mitigate significant direct impacts to the intersection of Airway Road/Sanyo Avenue that would occur in the Cumulative (2020) With SR-905 Phases 1A and 1B conditions. **Description of Requirement:** The Project applicant or Master Developer shall improve or agree to improve and provide security for the intersection of Airway Road/Sanyo Avenue as recommended by the Traffic Impact Study (refer to Traffic Impact Study Figure 51) and in consultation with the City of San Diego. Required improvements for the intersection of Airway Road/Sanyo Avenue shall include the following, or any other configuration acceptable to the City of San Diego and the County of San Diego and that achieves an acceptable level of service:

- Installation of a traffic signal;
- One (1) eastbound shared left-through-right lane;
- One (1) westbound left turn lane;
- One (1) westbound through lane;
- One (1) westbound right turn lane;
- One (1) northbound left turn lane;
- One (1) northbound shared through-right turn lane;
- One (1) southbound shared left-through lane; and
- One (1) southbound right turn lane.

It should be noted that the mitigation proposed for project impacts to this intersection are subject to approval by the City of San Diego and therefore may not be feasible. In addition, the required improvements also may not be feasible due to financial or right-of-way issues. In the event the improvements are determined to be infeasible, impacts would remain significant and unmitigable. **Documentation:** The Project applicant or Master Developer shall submit documentation from the City of San Diego demonstrating the requirements of this condition have been completed. **Timing:** The improvements shall be fully constructed to the satisfaction of the City of San Diego prior to the recordation of the Final Map for Unit 4. **Monitoring:** The Director of Planning and Land Use shall review the evidence provided by the applicant for compliance with this mitigation measure. Following review, the Director of Planning and Land Use shall provide the applicant with a letter of clearance. **Traffic Study References:** Section VIII and Figure 53.

M-TR-35 The Project applicant or Master Developer would be required to pay fees in accordance with the San Diego County TIF Ordinance. Payment of TIF fees would reduce Project impacts to the intersection of Airway Road/Paseo de las Americas to less than significant levels.

7.2 Environmental Design Considerations

7.2.1 Air Quality

- The proposed Project shall comply with Section 87.428, Dust Control Measures, of the San Diego Grading, Clearing, and Watercourse Ordinance (Ordinance No. 9547).
- Future building permits and improvement plans shall be conditioned so as to disallow construction activities simultaneous with demolition or mass grading activities on-site.
- Construction vehicles shall comply with California Vehicle Code Section 23114, which requires all trucks hauling dirt, sand, soil, or other loose materials to be covered with a tarp and maintain at least twelve inches of freeboard.

7.2.2 Biological Resources

- The On-Site Resource Management Plan (dated June 23, 2010) and the Off-Site Resource Management Plan (dated June 23, 2010), both of which were prepared by Helix Environmental, Inc., shall be implemented for the site improvement areas.
- The proposed Project shall comply with the best management practices as described in the Project's Stormwater Management Plan to ensure compliance with the County's Grading, Clearing, and Watercourse Ordinance.
- As a component of future Site Plans, a landscape plan shall be prepared which incorporates native plant species. Exotic or invasive plant species shall be prohibited.
- All graded areas shall be hydro-seeded with a native plant mix within six months of completion of each phase of grading except where subsequent construction activities (i.e., site improvements, building construction, etc.) are proposed.

7.2.3 Noise

- The proposed Project shall comply with the County Noise Ordinance (County Code of Regulatory Ordinances, Title 3, Division 6, Chapter 4), which prohibits construction activities between 7PM and 7AM, Monday through Saturday, excluding legal holidays.
- Mass grading of the proposed Project site shall occur as part of the first phase of the proposed Project.
- The sewer pump station proposed on Lot 38 shall consist of two (2) underground 40 horsepower pumps encased in a concrete vault. An alternative configuration for the pump stations may be proposed, provided it can be demonstrated that noise levels associated with the pump station would not exceed the 75 dBA exterior noise limit specified in Section 6310(d) of the San Diego County Zoning Ordinance.

7.2.4 Transportation/Traffic

- The roadway segment of Airway Road from Airway Place to Siempre Viva Road shall be improved to its ultimate half-width section as a Major Roadway prior to the recordation of the Final Map for Lots 1-20.
- The roadway segment of Siempre Viva Road between Airway Place and Airway Road shall be improved to its ultimate half-width section as a Major Roadway prior to the recordation of the Final Map for Lots 1-20.
- The roadway segment of Alta Road between Airway Road and Siempre Viva Road shall be improved to its ultimate half-width section as a Major Roadway prior to the recordation of the Final Map for Lots 1-20.
- The roadway segment of Alta Road between Siempre Viva Road and Street “A” shall be improved to the standard of a 2-Lane Industrial/Commercial Collector prior to the recordation of the Final Map for Lots 1-20.
- The roadway segment of Street “B” between Airway Road and Street “A” Road shall be improved to the standard of a 2-Lane Industrial/Commercial Collector prior to the recordation of the Final Map for Lots 1-20.
- The roadway segment of Street “A” between Alta Road and Street “B” shall be improved to the standard of an Industrial/Commercial Collector prior to recordation of the Final Map for Lots 1-20.
- The roadway segment of Airway Road from Airway Place to Street “B” shall be improved to the standard of a Major Road prior to the recordation of the Final Map for Lots 21-37.
- The roadway segment of Airway Road between Siempre Viva Road and Street “A” shall be improved to the standard of a Town Collector prior to the recordation of the Final Map for Lots 21-37.

- The roadway segment of Siempre Viva Road from Enrico Fermi Drive to Street “B” shall be improved to the standard of Major Roadway prior to the recordation of the Final Map for Lots 21-37.
- The roadway segments of Street “A” between Street “B” and Airway Road shall be improved to the standard of a 2-Lane Industrial/Commercial Collector prior to the recordation of the Final Map for Lots 21-37.
- The roadway segment of Street “C” between Siempre Viva Road and Street “A” shall be improved to the standard of a 2-Lane Industrial/Commercial Collector prior to the recordation of the Final Map for Lots 21-37.
- The roadway segment of Airway Road between Siempre Viva Road and Street “A” shall be improved to the standard of a 4-Lane Industrial/Commercial Collector prior to the recordation of the Final Map for Lots 38-50.
- The roadway segment of Street “C” south of Street “A” shall be improved to the standard of a 2-Lane Industrial Cul-de-Sac prior to the recordation of the Final Map for Lots 38-50.
- The roadway segment of Alta Road between Street “A” and the Project boundary shall be improved to the standard of a 2-Lane Industrial/Commercial Collector prior to the recordation of the Final Map for Lots 38-50.
- The roadway segment of Airway Road from Street “B” to Siempre Viva Road shall be improved to the standard of a Major Roadway prior to the recordation of the Final Map for Lots 51-59.
- The roadway segments of Siempre Viva Road between Street “B” and Airway Road and Airway Road and the Project Boundary shall be improved to the standard of a Major Roadway prior to the recordation of the Final Map for Lots 51-59.
- Prior to the recordation of the Final Map for each phase of the proposed development, on-site intersections shall be improved with appropriate traffic control measures as recommended in the Project’s traffic impact study (SEIR Appendix H1).
- As part of the improvements to Airway Road between Enrico Fermi Drive and the Project boundary, Siempre Viva Road between Enrico Fermi Drive and the project boundary, and Alta Road adjacent to the site and northerly to Otay Mesa Road, appropriate signage and striping shall be provided for bicycle lanes in a manner consistent with the County of San Diego Public Road Standards in effect at the time of application for such improvements. The configuration and amount of signage shall be subject to review and approval by the County DPW.

7.2.5 Utilities and Service Systems

- The proposed sewer pump station on Lot 38 shall, to the satisfaction of the Department of Public Works, be constructed using materials that are resistant to corrosion.

In the event that a CFD or similar mechanism is not in place at project approval, the Project would be conditioned as follows:

SEWER SERVICES: [DPLU, REG] [DPW, WW] [BP, GP, IP, UO] [DPLU, FEE]. The developer shall assure the availability of sewer services to serve the proposed development by means of one of the following methods:

In the event the project precedes establishment of a Community Facilities District (CFD).

Prior to the recordation of a Final Map / Parcel Map, the developer shall execute a covenant, to be provided by the City of San Diego, to participate in, and not object to, the formation of a Community Facilities District or other mechanism, to fund or reimburse the construction of the improvement phases, as identified in the Otay Mesa Trunk Sewer Infrastructure Upgrades Cost Estimate and Constructability Review (Brown and Caldwell) dated June 9, 2009. The developer shall secure performance of this obligation by recording the covenant with the County Recorder with a copy to the City.

In the event that a CFD is already established:

Prior to the recordation of a Final Map / Parcel Map, the developer shall annex into the Community Facilities District to fund or reimburse the construction of the improvement phases, as identified in the Otay Mesa Trunk Sewer Infrastructure Upgrades Cost Estimate and Constructability Review (Brown and Caldwell) dated June 9, 2009. The developer shall secure performance of this obligation by recording the annexation with the County Recorder with a copy to the City of San Diego.

7.2.6 Geologic Hazards

A. General Recommendations

- The undocumented fill, topsoil, alluvium, and the weathered, upper sections of the Otay Formation, are not considered suitable for the support of fill or structural loads in their present condition and will require remedial grading. Removal depths for topsoils between approximately 1 1/2 and 4y feet should be expected during grading operations. Removal depths of alluvium between 3 and 10 feet should be expected during grading operations. The actual depth of removal should be evaluated during grading operations.
- Highly expansive soils will be encountered within the topsoil, alluvium, and the clayey member of the Terrace Deposits. Topsoil and alluvium will be removed during remedial grading operations. Where highly expansive Terrace Deposits are exposed at finish grade, they should be undercut to provide at least a 5-foot-thick cap of "low" to "medium" expansive soil. Highly expansive soils should be placed in deeper portions of the fill areas. There are sufficient low- to medium-expansive soils available for capping purposes on site to mitigate expansive soils.
- Highly expansive soils will be encountered within the topsoil, alluvium, and the clayey member of the Terrace Deposits. Topsoil and alluvium will be removed during remedial grading operations. Where highly expansive Terrace Deposits are exposed at finish grade, they should be undercut to provide at least a 5-foot-thick cap of "low" to "medium" expansive soil. Highly expansive soils should be placed in deeper portions of the fill areas. There are sufficient low- to medium-expansive soils available for capping purposes on site to

mitigate expansive soils. The sandy soils of the Terrace Deposits and the soils of the Otay Formation should provide adequate soil support characteristics in their natural state and where placed as properly compacted fill.

- Fill areas or areas stripped of native vegetation will require special consideration to reduce the erosion potential. In this regard, desilting basins, improved surface drainage and early planting of erosion-resistant ground covers are recommended.

B. Soil and Excavation Characteristics

- Excavation and compaction difficulties may be experienced if grading operations are performed when the clayey soils are very wet or very dry. Extensive moisture conditioning may be required in either case.

C. Subdrains

- The geologic units encountered on the site exhibit permeability characteristics that could be susceptible under certain conditions to groundwater seepage and perching. The construction of a canyon subdrain is recommended to mitigate the potential for adverse impacts associated with hydrocompaction and seepage conditions.
- The final segment (low end) of the subdrain should consist of non-perforated drainpipe. At the non-perforated/perforated interface, a seepage cutoff wall should be constructed in accordance with Figure 6. If the subdrain should discharge into an existing open drainage channel a permanent head wall structure should be constructed in accordance with Figure 7.
- The final grading plans should indicate the location of the proposed subdrain. Upon completion of the subdrain installation, the project civil engineer should survey the subdrain locations prior to fill placement and provide an as-built grading plan depicting the subdrain locations.

D. Grading

- All grading should be performed in accordance with the Recommended Grading Specifications contained in Appendix C and the County of San Diego Grading Ordinances. Where the recommendations of Appendix C conflict with the Project's geotechnical report(s), the recommendations of the geotechnical report(s) should take precedence.
- Earthwork should be observed by and compacted fill tested by a qualified engineering geologist.
- Prior to commencing grading, a preconstruction conference should be held at the site with the owner or developer, grading contractor, civil engineer, and geotechnical engineer in attendance. Special soil handling and the grading plans can be discussed at that time.
- Site preparation should begin with the removal of all deleterious material and vegetation. The depth of removal should be such that material exposed in cut areas or soil to be used as fill is relatively free of organic matter. Deleterious material generated during stripping should be exported from the site.

- All potentially compressible surficial soils (undocumented fill soil, topsoil, alluvium, and weathered Otay Formation) within areas of planned grading should be removed to firm, unweathered dense soil of the Otay Formation and/or dense soils of the Terrace Deposits prior to placing fill and/or proposed settlement-sensitive improvements. The actual extent of the remedial grading should be determined in the field by the project geotechnical engineer or engineering geologist. Overly wet soil will require drying or mixing with drier soils to facilitate proper compaction.
- Once the removal of unsuitable soil is complete, the exposed ground surface should be scarified to a depth of approximately 12 inches, moisture conditioned to 1 to 3 percent above optimum moisture content, and compacted to a minimum relative compaction of 90 percent as determined by ASTM D 1557-02.
- Soil generated from on-site excavations are suitable for re-use as fill provided it is free from vegetation, debris and other deleterious material. Fill should be placed in layers no thicker than approximately 8 inches to allow for adequate bonding and compaction. All fill and backfill should be compacted to at least 90 percent of the maximum dry density at a moisture content ranging from 1 to 3 percent above optimum, as determined in accordance with ASTM Test Procedure D 1557-02. Fill soils placed at moisture contents outside this range of moisture content may be considered unacceptable at the discretion of the geotechnical engineer.
- In order to reduce the potential for differential settlement, it is recommended that where permanent buildings are planned, the cut portion of cut-fill transition pads within the building envelope be undercut 3 feet below finish-pad grade and replaced with properly compacted, low- to medium- expansive fill soils. The undercut should extend 5 feet laterally beyond the building footprint. Undercutting may also be necessary if concretions or cemented zones are exposed at or near finish grade. Similarly, cut lots containing highly expansive soils within 5 feet of finish grade should be undercut 5 feet and capped with low to medium expansive compacted fill.
- The upper 5 feet of all building pads (cut or fill) and 2 feet in pavement areas should be composed of properly compacted or undisturbed formation low to medium expansive soils. Fill soils with a high expansion potential should be placed in the deeper fill areas and properly compacted. Low to medium expansive soils are defined as those soils that have an Expansion Index of 90 or less when tested in accordance with UBC Table 18-I-B. Rocks greater than 12 inches in maximum dimension should not be placed in accordance with Section 6 of Appendix C.
- Bentonitic soil, if encountered, may have a very high expansive potential (EI greater than 130) and should not be placed within 10 feet of finish grade. Lots where bentonitic soils are present within 10 feet of finish grade should be individually evaluated and mitigative measures provided in updated geotechnical reports once building location and anticipated structural loads are determined.

E. Bulking and Shrinkage

- The following shrinkage/bulk factors can be used as a basis for estimating how much the on-site soils may shrink or swell (bulk) when excavated from their existing state and placed as compacted fills.

SHRINKAGE AND BULK FACTORS

Soil Unit	Shrink/Bulk Factor
Undocumented Fill Soil	15 to 20 percent shrinkage
Topsoil, alluvium, and weathered Otay Formation	10 to 15 percent shrinkage
Terrace Deposits and Otay Formation	5 to 10 percent bulk

F. Seismic Design Criteria

For seismic design, the following table summarizes site-specific design criteria per the 2000 CBC. The values listed on Table 6.6 are for Type B faults.

SEISMIC DESIGN PARAMETERS

Parameter	Value	CBC Reference
Seismic Zone Factor	0.40	Table 16-I
Soil Profile Type	Sc	Table 16-J
Seismic Coefficient, C,	0.40	Table 16-Q
Seismic Coefficient, C,,	0.56	Table 16-R
Near-Source Factor, N,	1.0	Table 16-S
Near Source Factor, N,,	1.0	Table 16-T
Seismic Source	B	Table 16-U

G. Foundations

- The following recommendations are for one- or two-story structures and assume that the grading operations will be performed as indicated in the Project's geotechnical report. The project is suitable for the use of continuous strip footings, isolated spread footings, or appropriate combinations thereof. In general, continuous footings for one- and/or two-story structures should be at least 12 inches wide and should extend at least 18 inches below lowest adjacent pad grade into properly compacted fill soils. Isolated spread footings should be at least 2 feet wide and extend at least 18 inches below lowest adjacent grade. If differential fill thickness beneath a proposed building exceeds 20 feet, modifications may be required. Figure 8 presents a construction detail depicting the depth to lowest adjacent grade. Minimum Continuousfooting reinforcement for one- and/or two-story structures should consist of four No. 4 steel reinforcing bars placed horizontally in the footings, two near the top and two near the bottom. Recommendations for reinforcement of isolated spread footings should be provided by the project structural engineer.
- The recommended allowable bearing capacity for foundations designed as recommended above is 2,500 pounds per square foot for 18-inch-deep footings. The values presented above are for dead plus live loads and may be increased by one-third when considering transient loads due to wind or seismic forces.
- Foundation excavations should be observed by a qualified geotechnical engineer prior to the placement of reinforcing steel and concrete to verify that the exposed soil conditions are

consistent with those anticipated. If unanticipated soil conditions are encountered, foundation modifications may be required.

- Footings located within 7 feet of the top of slopes are not recommended. However, footings that must be located within this zone should be extended in depth such that the outer bottom edge of the footing is at least 7 feet horizontally inside the face of the slope.

H. Concrete Slabs-on-Grade

- Interior concrete slabs-on-grade for office usage should be at least 5 inches thick and should be underlain by at least 4 inches of clean sand. Where moisture-sensitive floor coverings are planned, a visqueen moisture barrier should be provided and placed at the mid-point within the 4-inch sand cushion. For warehouse floors and/or where heavy concentrated floor loads or light to medium forklift loads are anticipated, the slab thickness should be increased to 6 inches and underlain by 4 inches of Class 2 base rock material compacted to 95 percent relative compaction. If heavy forklift loads are anticipated, the slab thickness should be increased to 7 inches and should be underlain by at least 6 inches of Class 2 base rock material. The allowable soil bearing pressure under slabs with low to medium expansive soils is 1,500 pounds per square foot.
- Minimum reinforcement of slabs-on-grade placed on low- to medium-expansive soil should consist of No. 3 reinforcing bars placed at 18 inches on center in both horizontal directions. The concrete slabs-on-grade should also be provided with dowels extended from the slabs to footings and walls to prevent vertical movement between the slabs and footings and/or walls.
- The concrete slab-on-grade recommendations are minimums based on soil support characteristics only and a structural engineer should evaluate the structural requirements of the concrete slabs for supporting equipment and storage loads.
- All exterior concrete flatwork not subject to vehicular traffic should conform to the following recommendations. Slab panels in excess of 8 feet square should be at least 4 inches thick and should be reinforced with 6x6-W2.9/W2.9 (6x6-616) welded wire mesh to reduce the potential for cracking. In addition, all concrete flatwork should be provided with crack-control joints to reduce and/or control shrinkage cracking. Crack-control spacing should be determined by the project structural engineer based upon the slab thickness and intended usage. Criteria of the American Concrete Institute (ACI) should be taken into consideration when establishing crack-control spacing. Subgrade soils for exterior slabs should be compacted in accordance with criteria presented in the grading section of this report. The subgrade soils should not be allowed to dry prior to placing concrete.
- Crack-control joints should be spaced at intervals no greater than 12 feet. Literature provided by the Portland Cement Association (PCA) and American Concrete Institute (ACI) present recommendations for proper concrete mix, construction and curing practices, and should be incorporated into project construction.

I. Retaining Walls and Lateral Loads

- Retaining walls that are allowed to rotate more than $0.001H$ (where H equals the height of the retaining position of the wall) and having a level backfill surface should be designed for an active soil pressure equivalent to the pressure exerted by a fluid with a density of 30 pounds

per cubic foot (pcf). Where the backfill will be inclined at no steeper than 2:1 (horizontal:vertical), an active soil pressure of 50 pcf is recommended. These soil pressures assume that the backfill materials within an area bounded by the wall and a 1:1 plane extending upward from the base of the wall possess an Expansion Index of less than 50. Where backfill materials do not conform to the above criteria, Geocon Incorporated should be consulted for additional recommendations.

- Where walls are restrained from movement at the top, an additional uniform pressure of $7H$ psf (where H equals the height of the retaining wall portion of the wall in feet) should be added to the active soil pressure presented above. For retaining walls subject to vehicular loads within a horizontal distance equal to two-thirds of the wall height, a surcharge equivalent to 2 feet of fill soil (240 psf) should be added to the loading diagram.
- All retaining walls should be provided with a drainage system adequate to prevent the buildup of hydrostatic forces and should be waterproofed as required by the project architect. The use of drainage openings through the base of the wall (weep holes, etc.) is not recommended where the seepage could be a nuisance or otherwise adversely impact the property adjacent to the base of the wall. The above recommendations assume a properly compacted granular (Expansion Index less than 50) backfill material with no hydrostatic forces or imposed surcharge load. If conditions different than those described are anticipated, Geocon Incorporated should be contacted for additional recommendations.
- In general, wall foundations having a minimum depth and width of 1 foot may be designed for an allowable soil bearing pressure of 2,000 psf, provided the soil within 3 feet below the base of the wall has an Expansion Index of less than 90. The proximity of the foundation to the top of a slope steeper than 3:1 could impact the allowable soil bearing pressure. Therefore, the Project engineering geologist should be consulted where such a condition is anticipated.
- For resistance to lateral loads, an allowable passive earth pressure equivalent to a fluid with a density of 300 pcf is recommended for footings or shear keys poured neat against properly compacted granular fill soils or undisturbed natural soils. The allowable passive pressure assumes a horizontal surface extending at least 5 feet or three times the surface generating the passive pressure, whichever is greater. The upper 12 inches of material not protected by floor slabs or pavement should not be included in the design for lateral resistance. An allowable friction coefficient of 0.35 may be used for resistance to sliding between soil and concrete. This friction coefficient may be combined with the allowable passive earth pressure when determining resistance to lateral loads.

J. Slope Stability

Slope stability analyses using laboratory shear strength information and experience with similar soil conditions in nearby areas indicate that 2:1 (horizontal:vertical) fill slopes constructed of on-site granular materials should have calculated factors of safety of at least 1.5 under static conditions for both deep-seated failure and shallow sloughing conditions for heights of 20 feet. The 2:1 cut slopes are expected to be excavated predominantly in the Otay Formation. 2:1 cut slopes to the planned heights should possess a factor of safety of at least 1.5 with respect to slope instability if free of adversely oriented bedding, joints or fractures.

- Keying and benching operations during grading of the slopes should be performed in accordance with Appendix C of the Project's geotechnical report. Due to the presence of highly weathered Otay Formation at some locations, keying operations may extend deeper than normal (on the order of 3 to 5 feet).
- Cut slopes within the Otay Formation may require further evaluation due to the possible presence of claystone lenses. A stability fill may be necessary to prevent surficial sloughage of the slope face. The potential presence of bentonitic clay lenses and the associated slope stability recommendations can be addressed at the time of grading.
- All cut slope excavations should be observed during grading operations by the project engineering geologist to verify that soil and geologic conditions do not differ significantly from those anticipated.
- The outer 15 feet (or a distance equal to the height of the slope, whichever is less) of fill slopes should be composed of properly compacted granular soil fill to reduce the potential for surficial sloughing. In general, soils with an Expansion Index of less than 90 or at least 35 percent sand size particles should be acceptable as granular fill. Slopes should be compacted by backrolling with a loaded sheepsfoot roller at vertical intervals not to exceed 4 feet and should be track-walked at the completion of each slope such that the fill soils are uniformly compacted to at least 90 percent relative compaction to the face of the finished slope.
- All slopes should be landscaped with drought-tolerant vegetation having variable root depths and requiring minimal landscape irrigation. In addition, all slopes should be drained and properly maintained to reduce erosion. Slope planting should generally consist of drought-tolerant plants having a variable root depth. Slope watering should be kept to a minimum to just support the plant growth.

K. Preliminary Pavement Recommendations

The following recommendations are for preliminary purposes and are provided for interior streets, light vehicle traffic, and parking areas. The final pavement section design will depend upon soil conditions exposed at subgrade elevation, the results of additional Resistance Value (R-Value) following grading, and the criteria observed by the County of San Diego Public Works Department. The Traffic Indices are estimates and will require evaluation of traffic loads by the project civil engineer. The following preliminary pavement section recommendations are for on-site low to medium expansive soils.

PRELIMINARY PAVEMENT RECOMMENDATIONS (R-VALUE = 26)

Location	Traffic Index	Asphalt Concrete (inches)	Class 2 Aggregate Base (inches)
Heavy Truck Traffic	7.0	4.0	10.5
Interior Light Vehicle Traffic	5.5	3.0	8.0
Parking Stalls	4.5	3.0	4.0

- Pavement subgrade soils should be scarified, moisture conditioned, and recompacted to a minimum of 95 percent relative compaction as determined by ASTM D 1557-02. The depth of compaction should be at least 12 inches. Class 2 base course material should be moisture

conditioned to near optimum moisture content and compacted to a minimum of 95 percent relative compaction as determined by ASTM D 1557-02.

- Class 2 base should conform to Section 26-1.02B of the Standard Specifications for the State of California Department of Transportation (Caltrans). The asphalt concrete should conform to Section 203-6 of the Standard Specifications for Public Works Construction (Greenbook).
- The performance of asphalt concrete pavement is highly dependent upon providing positive surface drainage away from the edge of the pavement. Ponding of water on or adjacent to the pavement may result in pavement distress and subgrade failure. In addition, the surface drainage within planters should be such that ponding will not occur. Perimeter curbs adjacent to landscaped areas should extend to at least 12 inches below subgrade elevation to act as a cut off to moisture migration.

L. Minimum Resistivity, pH, Water-Soluble Sulfate, and Water-Soluble Chloride

- Laboratory test results indicate very low sulfate content with negligible sulfate exposure ratings according to California Building Code Table No. 19-A-4. Minimum resistivity test results indicates a severe corrosion potential with respect to buried metals. These tests were performed on samples selected at random and may not be representative of the actual corrosive potential of all the soils that will be exposed during the phases of grading and construction. If corrosion-sensitive improvements are planned, further evaluation by a corrosion engineer should be performed to incorporate the necessary precautions to avoid premature corrosion to concrete or buried metal underground lines in direct contact with in-situ soils.

M. Site Drainage and Moisture Protection

- Adequate drainage is critical to reduce the potential for differential soil movement, erosion, and subsurface seepage. Under no circumstances should water be allowed to pond adjacent to footings. The site should be graded and maintained such that surface drainage is directed away from structures and the top of slopes into swales or other controlled drainage devices. Roof and pavement drainage should be directed into conduits that carry runoff away from the proposed structure.
- Landscaping planters adjacent to paved areas are not recommended due to the potential for surface or irrigation water to infiltrate into the pavement's subgrade and base course. We recommend that subdrains to collect excess irrigation water and transmit it to drainage structures or impervious above-grade planter boxes be used. In addition, where landscaping is planned adjacent to the pavement, a cutoff wall along the edge of the pavement that extends at least 12 inches below the subgrade should be constructed.

N. Grading Plan Review

- The geotechnical engineer or engineering geologist should review the Grading Plans prior to finalization to verify their compliance with the recommendations of this report and determine the need for additional investigation, comments, recommendations, and/or analysis.

7.2.7 Hazards

Fire Safety

- Fuel Modification Zones will be required around all structures, and on roadsides, in compliance with the District and County Fire Codes. State law, County Fire Code and the Fire District require at least 100' fuel modification from buildings. Therefore, Fuel Modification should be provided for a distance of 100' around all structures (or up to an adjoining structure if less than 100').
- There shall be Fuel Modification Zones on each side of any onsite and public roadsides throughout the development. Fuel Modification Zones are required be 30' wide on each side of any new driveway or roadway, and 20' each side of any existing roadway per the County Fire Code. The zone may be a landscaped, irrigated wet zone, utilizing fire resistive vegetation. Ground cover to be 4" or less. Any shrubs to be 2' or less. There shall be no flammable vegetation or flammable trees in the roadside, or center median, fuel modification zones or landscaped areas. Any trees shall be fire resistive and shall not be of a type prohibited in this plan. They should be spaced 30' between canopies. Trees to be limbed up 1/3 height or 6' whichever is greater. There shall not be closed canopies over public roads. Onsite roads to be clear to the sky. Any trees shall be planted 10' from edge of road to center of tree trunk. They will be maintained in compliance with this plan, by the Landscape Maintenance District (LMD) or other County approved legal entity, or an owners association or maintained by the property managers. Responsibility for the maintenance shall be included in a legal document to approval of County DPLU such as a contract with tenant, CC&R's or deed encumbrances. The property owner shall assure that proper roadside vegetation is done on an ongoing basis. No vegetation prohibited by the Project's fire protection plan shall be planted in this area. Erosion control and soil stability must be provided.
- 30' of clearance of native vegetation, weeds and brush shall be provided under and around LPG tanks. RFPD Fire Code requires 10'.
- Any water retention basins and any aboveground drainage channels must be kept clear of any flammable vegetation on an annual and ongoing basis.
- The following plants are prohibited from being included in Project landscaping plans: *Rosmarinus secies*; *Salvia species (numerous)*; *Salsola australis*; *Solanum Xantii*; *Silybum marianum*; *Thuja species*; *Urtica urens*; and *Vince major*. Any other plant species determined by the County of San Diego to pose a hazard due to fire conditions also shall be prohibited.
- Prior to approval of any Site Plans, the size and configuration of the required fuel modification zones around buildings and roads shall be identified and depicted on the landscaping plans.
- There shall be no vegetation or trees that obstruct Fire Department operations, including access, raising of ladders, or use of fire hydrants and Fire Department connections. Onsite access roads should be kept clear to the sky with no overhanging canopies.
- Limit use of plants, which develop large amounts of foliage, branches, or dead material.

- Limit use of plants, which develop deciduous or shaggy bark.
- Limit use of plants, which develop dry or dead undergrowth.
- Recommended spacing of trees is a minimum of 20' feet between mature canopies.
- Tree canopies shall not reach to within 10' of chimneys or structures.
- No tree canopies overhanging any onsite road.
- Shrubs to be fire resistive. Shrubs shall be spaced to create a firebreak between groupings.
- Configure plantings so that they are spaced and maintained so as not to create a direct path from native growth to a structure.
- All plant species must be limited to those approved by the Fire District for this area.
- Prohibit massing of vegetation adjacent to structures, especially under eaves, overhangs, windows, vents, decks, within 10' of chimneys, etc.
- Vegetation management requirements and the provisions for continuous maintenance must be documented on landscape plans, any CC&R's, and deed encumbrances. It must be absolutely clear to building owners that they have a legal responsibility to maintain a fire safe defensible space on all sides of the structures in compliance with this plan and the Fire District requirements. The Fire Marshal shall enforce all vegetation management requirements, and structural protection requirements on all private property, and assure vegetation management requirements are met. Yearly maintenance, before fire season (typically May 1, including during construction), and more often as needed, is required to reduce fuel volumes, eliminate weeds, remove dead vegetation, cut grass, limb up and prune, remove down and dead fuels, remove flammable under story, etc.
- If new planting is desired in areas of retained native vegetation, then an irrigation system shall be designed to sustain new plantings as needed. Caution should be used so as to not over irrigate natives and thereby increase the dead to live fuel ratio; negating the high leaf moisture.
- Caution must be used so as to not cause erosion or ground (including slope) instability, or excessive water runoff, due to planting, landscaping, vegetation removal, vegetation management, or irrigation.
- No combustible netting, matting, etc., in landscaped areas, on slopes, etc.
- Special attention is needed for H-2 occupancies; those with combustible dusts involved, and which present a moderate explosion hazard or hazard from accelerated burning, per Section 307.4 of the 2007 California Building Code. This includes certain uses and storage of flammable liquids, oxidizers and class 3 water reactive materials. H-2 occupancies must be located at least 30' from a property line if the building is over 1000 square feet, per 2007 California Building Code Section 415.3.1.

- Buildings where explosion venting is required per 2007 California Fire Code Section 911 and 2007 California Building Code Section 415, require a clear vertical space above the building or an unobstructed 50' horizontal distance from the structure wall at a location where the explosion venting system is.
- Large quantities of exterior storage are discouraged due to the potential fire exposure hazard. Quantities of exterior storage should not exceed exempt quantities per tables in the Fire Code.
- Suitable, setbacks of buildings from the Border are recommended as there is no control over what can be built or stored on the other side of the Border and it cannot be enforced by the Fire District. In addition, 6' high solid masonry walls, with security protection should be provided on those property lines.
- All onsite roads, including on site driveways on individual lots must be paved to support heavy trucks. The County Fire Code requires the roads and driveways to support a 50,000-pound fire apparatus. Roads and driveways must meet these criteria and must also be designed to support heavy semi-trucks and fire trucks. It is recommended that all roads and on site driveways be designed to withstand the weight of a future aerial ladder fire truck, which would be about 65,000-75,000 pounds. Note that the public roads are under construction. They will reportedly be designed for heavy truck loads. Design of future on site roads shall meet RFPD requirements and County requirements and shall also be designed to support an Aerial Ladder truck.
- All roads providing access to these parcels are required to be named with proper signage at all intersections to approval of the Fire District and DPW.
- At signalized intersections, the developer is required by the Fire District to install pre-emptive traffic devices (Opticom).
- Onsite fire apparatus roads on individual lots should be at least 26' wide unobstructed width (unobstructed by parking). It should be clear to the sky of any overhangs. For buildings 28' high from accessible grade, the road width should be 28' unobstructed width clear to the sky for aerial ladder operations. Roads shall be within 150' driving distance of any portion of an exterior wall. Where possible, onsite roads should encircle the building for fire truck access. Onsite parking must be controlled to maintain the onsite access road widths at all times,
- Centerline of onsite access roads should be located parallel to and within reasonable proximity of the exterior walls of a building, to allow proper/safe use of ground or aerial ladders by firefighters.
- Owner should record a "Yard Agreement" on each, parcel to guarantee that the required on site fire access roads are kept clear of vehicles, trailers, storage and structures. Note: Consultant states that this is a very important issue for properties such as this with many trucks and trailers coming in and out, and perhaps needing to park overnight until unloaded or loaded. It is also important that no temporary modular or trailer offices, etc, are located in fire access roadways.
- There should be a recorded requirement on each lot to maintain all roads and driveways.

- Fire lanes need to be posted "No Peking-Fire Lane". It is recommended that the signage be bi-lingual.
- Dead end roads or driveways exceeding 150' shall have Fire District approved turnarounds. Cul-de-sac bulbs should be at least 84' in diameter for fire truck turning.
- All buildings should be separately addressed off the closest public entrance road. Addresses and unit numbers should show on each side of the buildings and be to Fire District approval. Numbers to be 6" high with 1/2" stroke.
- Geographical directories may be required at entrances to multiple building developments on a parcel.
- Firefighter foot access, 6' wide, all weather, should be provided around all sides of buildings.
- Actual location and size of Fire truck access and firefighter foot access to be to approval of Fire District at time of submittal of detailed plans on any parcel.
- Any gates shall comply with the requirements of the RFPD and the County DPLU Fire Marshal. Gates are required to have KNOX switches, which override all other command functions and open the gate. They shall also have emergency traffic control-activating strobe light sensors (Opticom) or other devices approved by the Fire Chief, which shall activate gate on approach of fire apparatus, and have a battery backup or manual mechanical disconnect in case of power failure. All gates and their controls are to be to approval of Fire Chief.
- The onsite water supply at any building should preferably be an extension of the Public Water supply, per the RFPD Fire Chief, so that ongoing maintenance and operability can be assured by the water company. Any onsite main size should be at least 10", and greater if needed, to properly supply the worst case needed fire flow and pressure to buildings and sprinkler systems. Detailed plans for any onsite public or private water system shall be submitted to the Fire District and DPLU for review and approval. The public and private water systems must be sized to provide the needed flow and pressure, including the most demanding sprinkler system flow plus hose stream/fire hydrant flow allocations as determined and required by the Fire District and the DPLU Fire Marshal. Any private systems shall have at least two connections (custody transfer stations) to the public water system and shall have multiple approved Fire Department connections within 50' of a public fire hydrant to allow Fire District to pump into the private loop if needed.
- All buildings on any parcel will have fire sprinkler systems, which are remotely supervised, including all valves, to an approved 24/7 alarm monitoring company. Risers and valves shall be on exterior of building or in a 1 hour rated room directly accessible from exterior. The systems may be ESFR systems or non-ESFR systems with in-racks if needed. The required fire flow for the sprinkler systems is based upon the anticipated commodity and storage height, or the manufacturing risk whichever is applicable. The County standard for spec buildings is .45/3000. However, much higher flows may be needed as shown on the generic table on the following page. It is critical that the private water system, points of connection to the public system, and the risers be designed for the highest potential sprinkler demand plus hose stream/hydrant allocations per Fire District, based upon the potential tenants. Note that

certain occupancies could require other types of fire suppression systems such as foam, water mist, etc.

- Any warehouse buildings should be designed for at least .45 over 3000 or more if determined necessary by the sprinkler designer, plus hose stream allowances, to assure adequate protection for the tenant occupancies. Actual system design and calculations are the responsibility of the sprinkler designer and engineer and are out of the scope of this plan. The building owner/developer will be responsible to assure the design and installation of the sprinkler systems, risers, and water supply, to provide the required sprinkler system demand plus hose streams, and determine the total needed fire flow based on the contents, commodities, building size and type of construction per Fire District and DPLU Fire Marshal requirements. The developer and system designer need to also assure that the needed fire flow is available. All detailed sprinkler system designs and calcs, and proposed fire flows for the water mains, shall be submitted to Fire District and DPLU Fire Marshal for review and approval prior to construction. Fire protection system plans relative to tenant improvements and change of occupancies, need to be submitted and approved by the Fire Agencies, prior to any future occupancy or tenant change.
- Separate Fire Department sprinkler connections (FDC) should be provided for each separate building. They should be located about 4' in from the public street curb; at least 40' from the building. in front of the building (address side). There should be a fire hydrant (public hydrant) within 25' of the connection on same side of road. Buildings requiring a fire flow of 2,000 GPM or greater, shall have a 4 inlet FDC. In addition, an FDC with an approved number and size of Fire Department connections should be required at each double backflow point of connection from public to private water system (Consultant note: So that any private system can be charged by Fire Department from public water supply.) Listed one-way check valves shall be installed in the proper locations. Consultant recommends that all double backflow prevention devices be UL listed or FM approved for fire service and have indicating O. S and Y valves supervised and locked in operating position, and that they be visible from public street accessing the building.
- Sprinkler systems and all valves to be supervised to an approved 24/7 monitoring company. Consultant recommends that they also be locked in the operating position.
- Sprinkler alarm bell to be on building facing street the building, is addressed on. The bell should also have a flashing red light to indicate which riser is flowing. Consultant recommends that signage on bells stating to call Fire Department-911 if bell ringing shall be bilingual.
- Required fire flow for sprinklers could be as much as 3530 GPM or more. Actual design is up to the Fire Sprinkler Contractor.
- Buildings on any parcel will need to have fire protection systems designed to operate within the available fire flow and pressure from the public water system, or will require a private water system with stored water and fire pumps. This can also result in a limitation of type or size of occupancy.

- A recorded CC&R document, or other approved legal document which outlines care and maintenance of any private water system, should be provided to the Fire District for approval. This document should include the maintenance and compliance of onsite Fire Lanes.
- The water system, whether public or private, must be designed to the standards of the Otay Water District, the Rural Fire Protection District, and AWWA Standard M-31; "Distribution Requirements for Fire Protection" latest edition (currently the third edition). NFPA 24 shall also be followed for a private system.
- Hydraulic fire protection water system calculations shall be submitted to the Fire District and DPLU Fire Marshal for approval prior to construction. Consultant recommends that the plans for any private water system, and any onsite sprinkler and hydrant system, also be submitted to the Fire District and DPLU Fire Marshal for review and approval prior to construction. This shall include locations of hydrants, FDC's, PIV's, isolation valves, lateral valves, and risers.
- Risers and valves should be on exterior of building or be in a fire rated enclosure directly accessible from exterior of building.
- Fire hydrant layout shall be as approved by Fire District. Onsite hydrants are required when the distance from a hydrant in the street exceeds 150' driving distance onsite. New hydrants should be spaced 300' apart on public roads and 300' apart on onsite access roads. Fire District requires the fire, hydrant system to flow at least 2000 GPM at 20 PSI at a building. Fire hydrants should be located at least 40' from buildings or have a 2 hour fire wall at location of hydrant.
- Hydrants to have two 4" outlet connections and one 2.5" outlet connection per the Fire District, and the Water District standard and as needed for industrial fire operations.
- Lateral valves should be 10-25' from (front of) hydrant.
- Hydrants, sprinkler connections, PIV's, FDC's, and, any exterior sprinkler risers located closer than 4' to the face of any curb (consultant note: or close to any areas of truck traffic including backing) must have crash posts at least 6" in diameter, constructed of schedule 40 steel, concrete filled, spaced not more than 4' between posts on center, set not less than 3' deep in an adequate concrete footing of not less than 15" diameter, and set with posts not less than 3' aboveground. Posts must not block operation of fire hydrants or Fire Department Connections.
- Hydrants must have no obstructions within 3' and no trees within 10'. Consultant recommends same for Fire Department Connections.
- Hydrants should have a 3'x 3' concrete pad around base to prevent build up of weeds and vegetation. If hydrants are dry barrel, gravel shall be used instead.
- Blue dot hydrant markers must be installed at each hydrant. Red dot markers must be installed at each FDC.

- There should be a zoned graphic fire alarm annunciator at the main entrance to each building on the address side. Consultant note: annunciator to monitor and annunciate all sprinkler risers and zones and any smoke detection zones.
- Any required fire pump system requires two redundant listed or approved fire pumps complying with NFPA 20. One of the pumps should be a diesel or approved emergency power shall be provided.
- Buildings storing high piled stock will have smoke vents, or approved smoke removal systems, for high piled stock. Smoke vents should have tempered glass and have the capability to be opened manually on roof, or from warehouse floor area by firefighters' use of a latch, etc.
- All buildings should be provided with the means for firefighters to remove smoke, such as openable roof vents or approved smoke control and removal systems.
- Interior partitions between tenant units in buildings should be at least 1-hour fire rated walls, or may be required to be a higher rating if required by the CBC.
- Due to lack of Fire Department staffing and Aerial Ladder Truck, remotely supervised, zoned, smoke detection systems should be installed in all buildings over 40,000 square feet in order to detect a fire while it is still small, or such buildings should be divided by fire walls every 40,000 square feet. H. Buildings to have KNOX data and key boxes to Fire District approval. It is recommended by consultant that the data boxes also contain a suitable floor plan, showing location of sprinkler risers, alarm panels, HVAC controls, gas shutoffs, electrical panels, any roof access stairs, and an updated list of the types of commodities stored in the building.
- Buildings should have approved stairways to provide Firefighter access to roof due to lack of ladders to reach the roof until a ladder truck is placed in service in East Otay Mesa. Any locks on door to stairs to be openable by Firefighters, from outside of stairwell, with a Fire Department KNOX lock key.
- Any buildings intended for high piled stock shall comply with Chapter 23 of the Fire Code, including firefighter access doors, having hardware openable by firefighters from exterior with a KNOX key, every 100' lineal feet, smoke vents or smoke removal systems per the Fire Code, and wet standpipes. The consultant recommends that smoke vents be openable manually from rooftop and from warehouse floor. High Piled stock buildings should assume storage of high hazard commodities and plastics.
- Any awnings on buildings, such as over the loading docks, should be noncombustible, spiinklered and designed so as to not collapse during a fire.
- Any storage or use of hazardous materials, combustible or flammable liquids, compressed gases, etc., shall comply with District Fire Code. Consultant also recommends that there be no storage of fireworks, explosives, or flammable or hazardous compressed gases. Hazardous materials and flammable or combustible liquids, various gases, etc, must be kept below Maximum Allowable Quantities (exempt quantities) if these occupancies are not designed as H occupancies. Hazardous materials or flammable liquid storage rooms (H rooms) may be

allowed by the Fire District and the Building official, if exempt quantities are exceeded, after use of control area provisions of the Code. Exterior storage of LPG, LOX, Ammonia, acids, flammable or combustible liquids or gases, and other hazardous materials, should be located away from buildings and property lines and should have proper built in fire protection. Water spray systems may be required. Chapters 27 and 34 of the 2007 Fire Code list the required distances from buildings, property lines and public ways for hazardous materials and flammable and combustible liquids. Chapters 30 and 35 regulate compressed gases. LPG is regulated by Chapter 38. Developers and Architects for specific lots must check the Fire Code exterior storage and spacing requirements when designing a building and lot.

- Any fueling of vehicles on lots must comply with Fire Code Chapter 22.
- Any parking structures to comply with NFPA Standards and the Fire Code including fire sprinklers and wet standpipes.
- Any building storing Hazardous Materials or flammable or combustible liquids shall have the NFPA hazard (diamond) signal displayed on the street side of the building and over the entrance to the storage area. Occupancies with significant hazardous materials risks should provide additional funding, above the basic RFPD funding requirements, for Hazardous Materials equipment, firefighting foam, etc.
- Roofs shall be Class A fire rated roof assemblies, (if available for flat roofs if they are used), in compliance with the County Building Code Section 704.A and also with State Building Code Chapter 7-A. Roof coverings where a profile allows space between covering and roof decking shall have any space at ends, or elsewhere, fire stopped to prevent intrusion of flame or burning embers. If Class A roof assemblies are not yet available for flat roofs, then Class B roofs, may be acceptable to DPLU Fire Marshal, upon submittal of a request for Alternative Methods to the Fire District and the DPLU Fire Marshal. (based on a telecon with Ralph Steinhoff, DPLU, on 7-28-06 regarding this issue).
- When provided, exposed valley flashings shall not be less than 0.019 inches (No. 26 galvanized sheet gage) corrosion resistant metal installed over a minimum 36 inch-wide underlayment consisting of one No. 72 ASTM cap sheet running the full length of the valley.
- There should be no light wood, on exterior of buildings. Heavy timber is okay. Exterior walls will most likely be tilt up concrete. Exterior walls will be of approved non-combustible or ignition resistant materials as required by the Building Code based on size and type of occupancy. 2" nominal solid blocking will be installed between rafters at any roof overhang. Exterior wall coverings shall extend from top of foundation to the roof and terminate at 2" nominal solid wood blocking between rafters at all overhangs, or in the case of enclosed eaves, terminate at the enclosure.
- Any eaves and soffits, shall meet the requirements of SFM 12-7A-3 or shall be protected by ignition resistant materials or non-combustible construction on the exposed underside.
- Protection for vents on buildings shall comply with County Building Code Section 704A.2. No vents in soffits, rakes, eaves, eave overhangs, cornices, between rafters at eaves, or other similar exterior overhangs. HVAC intakes should also have proper screens. Vents should be designed to prevent intrusion of airborne burning debris from a vegetation fire or other

exposure fire. Vents shall have louvers and 'A" mesh screens per Chapter 704A.2.1 of the County Building Code.

- Any turbine vents shall be designed to rotate in one direction only so as to not suck smoke and burning debris into a building.
- Exterior windows, window walls, glazed doors and glazed openings within exterior doors shall be insulating-glass units with a minimum of one tempered pane, glass block units, tempered glass, or have a fire resistance rating of not less than 20 minutes, per CBC Chapter 7-A. Glazing frames made of vinyl material shall have welded corners, metal reinforcement in the interlock area, and be certified to ANSI/AAMA/NWDA 101/LS 2-97 structural requirement.
- Exterior door assemblies shall comply with the performance requirements of Standard SFM 12-7-A-1 or shall be of approved non combustible construction or solid core wood having stiles and rails not less than 1 3/8" thick with interior field panel thickness no less than 1 'A" thick, or have a fire resistance rating of not less than 20 minutes. Refer to County Building Code Section 704A.3.2.3. Approved non combustible or exterior fire retardant treated wood vehicle doors are not required to comply with this Section
- Skylights shall be tempered glass. Alternative equivalent materials may be submitted for approval of Building Official, if tempered glass would affect operation of smoke vents, due to weight
- Roof gutters shall be provided with the means to prevent the accumulation of leaves and debris in the gutter.
- Trash areas/containers will be on exterior of buildings, and should not be connected to interior of a building. The locations shall be to approval of the Fire District. Trash dumpsters within 5' of a building should have exterior sprinkler protection or be in a 1 hour rated enclosure.
- Fire extinguishers shall be provided throughout all buildings, including at each loading dock door (in the event of a truck fire).
- Wet standpipes will be installed where required.
- Paper faced insulation is prohibited in attics and ventilated spaces.
- Decking, floors and underfloor protection; County Building Code 704A.4.1.: Exterior balconies, carports, decks, patio covers, unenclosed roofs and floors and similar architectural appendages and projections shall comply with sections 704A.4.1.2 and 704A.4.1.3
- Decking surfaces, stair treads, risers and landings of decks, porches and balconies shall be constructed of approved non-combustible materials, exterior fire retardant treated wood heavy timber, one-hour fire resistant materials or alternative materials which comply with section 704A.4.1.4 of the 2007 County Building Code. Any awnings, umbrellas, or covers should be fire retardant or noncombustible.

- Underfloor and appendages protection: the underside of cantilevered and overhanging appendages and floor projections shall maintain the ignition resistant integrity of exterior walls, or the projection shall be enclosed to grade. Buildings shall have all underfloor areas enclosed to the grade with exterior walls in accordance with County Building Code section 704A.3, per County Building Code section 704A.4.2.
- Sprinkler head deflectors and lighting fixtures shall be so located to assure a 3' clearance from storage, or more if necessary.
- Fences or structures less than 5 feet from a building: Any portion of a fence or other structure less than 5 feet from a building shall be constructed of approved non combustible material, pressure treated exterior fire retardant wood or material that meets the same fire resistant standards of the exterior walls of the building. Material with Fencing along the border should be solid masonry block walls.
- Forklift refueling stations to be outside.
- Battery charging to have proper protection/ventilation/spill control.
- Tenant improvements/Fire Permits: Plans for Tenant Improvements shall be submitted to the Rural Fire District and the County Department of Planning and Land Use for review and approval prior to occupancy of any original or subsequent tenant. Plans shall include Fire sprinkler plans and calcs, and shall also address all applicable Fire Code requirements and High Piled Stock permit submittal requirements as found in Chapter 23 of the State and County Fire Code. Any Fire Permits required by the State and County Fire Code, shall also be applied for.
- Redundant methods to call 911 should be provided, such as hard line phones and cellular phones. The preference for a primary method is use of the "land line" phone to assure the Public Safety Answering Point (PSAP) who receives the call can identify location of the site.
- Emergency plans: Each tenant should have a bi-lingual Emergency Plan which includes steps for employees to take in an emergency, and makes it clear who is assigned to call 911. Manual fire alarm systems will be provided as needed to alert employees.
- Onsite fire lanes shall be identified in a manner acceptable to the Fire District to prevent parking therein. Any truck parking on the streets needs to be controlled so that a minimum 24' wide unobstructed fire lane is maintained.
- All buildings are required to have approved addresses visible and readable from the street.

Vector Control

- Semi-annual (early Spring and Fall) removal of basin emergent vegetation or when recommended by the DEH San Diego County, Vector Control Program.
- An alternative to the basin clearing would be removal of swaths or patches of vegetation on a quarterly basis. No stand of cattails would be larger than a nominal 20 feet wide by 10 feet deep (200 sq. feet surface area) and all cattail stands will be separated by 10 feet of non-vegetative water.

- Standing water shall not have emergent vegetation, e.g. cattails, sedges, etc. in excess of 50% of the surface area.
- Emergent vegetation will be controlled by hand labor, mechanical means or by frequent clear cutting. Herbicides may be used as needed to control re-growth.
 - The clearing is intended to prevent habitation for mosquito larvae.
 - Removal of the vegetation by hand will be the preferred method in order to lessen the re-growth frequency and density
- Foot pathways will be maintained for surveillance and abatement methods. These will be a minimum of 5 feet wide to allow access to the water without disturbing the emergent vegetation.
- Trash and debris in the basin should be removed semiannually or as needed to prevent clogging of the outlet structure.
- The drawdown time of the detention basin shall be monitored after each rain event 12 hours or longer. If the drawdown time exceeds 72 hours, mosquito larvicide shall be applied by a certified professional.
- The owners will educate themselves on the mosquito life cycle, potential breeding sources, and the importance of managing mosquitoes.